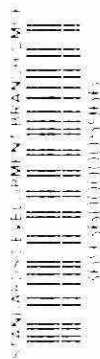


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ACIDIC PRECIPITATION
IN ONTARIO STUDY

CUMULATIVE AMBIENT AIR
CONCENTRATION LISTINGS
1986

ARB-033-88

APIOS-001-88

JUNE 1988

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Ministry
of the
Environment

E. PICHÉ, Director
Air Resources Branch

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CUMULATIVE AMBIENT AIR CONCENTRATION

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Special Studies and Research Planning Unit
Atmospheric Research and Special Projects Section

Ontario Ministry of the Environment

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880 Bay Street, 4th Floor

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June 1988

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A.P.I.O.S. Coordination Office

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CONCENTRATION RESULTS

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Mattawa	22	29
McKellar	21	31
Moonbeam	27	33
Moosonee	35	35
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CONCENTRATION RESULTS

<u>Station Name</u>	<u>Map Ref. No.</u>	
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PART I

INTRODUCTION

INTRODUCTION

The data listed herein are a summary of the results acquired from the APIOS cumulative ambient air sampling network from January 1986 to December 1986. All data presented in this report have been screened for validity. Remarks and qualifications have been appended to records, and/or results where necessary. The screening procedure involves the application of a Dixon Ratio Test to concurrent data from all the sites in the same region over a given sampling period. Field comments are referred to in order to assist in the identification of problematic samples. Samples that were determined to be obvious outliers were flagged as unreliable ("U").

The sampler utilized for cumulative ambient air sampling is the Metrex AS-2 low volume air sampler. The sampler is loaded and the filter pack is exposed for 28 days beginning at 0700 h EST and terminating at 0700 h EST at the end of the sampling period. Sampling details are described in another document¹.

Station Identification

The station identification is defined by four descriptive fields (e.g. - Dorset/Cumulative/LoVol #20). The first field refers to the sampling location. The second and third fields describe the sampling interval and the instrumentation used respectively. The last numeric field refers to the index code utilized on the location map.

Cumulative Ambient Air Concentration Listings

Each filter pack is loaded with a Whatman 40 filter, a nylon filter and a pair of Whatman 41 filters with the first two filter types being upstream and the last filter type being downstream. The Whatman 40 filter is analysed for particulates including SO₄, NO₃ and some trace metals.

-
1. Chan, W.H., Orr, D.B. and Vet, R.J. (1984). Acidic Precipitation in Ontario Study - An Overview: The Cumulative Wet/Dry Deposition Network. Ontario Ministry of the Environment Report #ARB-164-84-ARSP.

The nylon filter is analysed for gaseous HNO_3 and the Whatman 41 filter (impregnated with K_2CO_3 - glycerol) is analysed for

gaseous SO_2 . Beginning in 1985, "Sulphur Dioxide" is corrected by the addition of nylon filter sulfate. In these reports, the sulphur loading on nylon filters is interpreted as sulphur dioxide. However, it is possible that organic sulphur compounds also contribute to this loading. Methods do not currently exist^{to} quantify this contribution in routine network operation. The reported parameter "TOTL NO3" represents total nitrates and is calculated by the summation of N-HNO_3 and N-NO_3 . No individual value of particulate nitrate and nitric acid are reported due to potential artifacts of the filter media used. Prior to 1986, if a detection limit was encountered in the calculation of "TOTL NO3" then a value corresponding to one half the detection limit was utilized. These results are no longer halved. Remark codes (e.g. -U, A) appended to individual results are defined in a later section.

Field Comment Code Index

- A - Sampler malfunction
- B - Hydro failure (known/suspected)
- C - Flow volume suspect
- D - Contamination (known/suspected)
- E - Filter placement incorrect
- F - Sample not submitted
- Q - Other

Office Comment Code Index

- F - Data invalidated - if the daily average flow volume is outside the range of $(2880 \pm 50\%)$ litres per day.
- Z - Abnormal sampling period.

Result Remark Code Index

- < - actual result greater than value reported
- > - actual result less than value reported
- <T - actual result less than criterion of detection
- <W - no response, minimum possible result reported
- A - approximate value
- U - unreliable result
- D - outlier of Dixon Ratio Test

INTRODUCTION

Les données cumulatives que renferme le présent rapport sont tirées du réseau d'échantillonnage de l'air ambiant, créé dans le cadre de l'Étude sur les précipitations acides en Ontario. Ces données, recueillies de janvier à décembre 1986, ont toutes été contrôlées pour s'assurer de leur validité, et les observations et les réserves ont été annexées aux registres ou aux résultats, le cas échéant. Le contrôle prend la forme d'un test de rapports Dixon que l'on applique aux données obtenues simultanément de tous les points d'un même secteur au cours d'une période d'échantillonnage donnée. Les observations sur place permettent d'isoler ici les échantillons problématiques. Par ailleurs, les échantillons considérés comme des cas déviants manifestes ont été rejetés à cause de leur manque de fiabilité («U»).

Aux fins de cette enquête, on utilise un échantillonneur à faible débit de modèle Metrex AS-2. On insère les dispositifs de filtrage dans l'appareil et ceux-ci sont exposés pendant 28 jours, de 7 heures, heure de l'Est, la première journée à 7 heures, heure de l'Est, la dernière journée. Les détails sur l'échantillonnage sont donnés dans un autre document¹.

1. Chan, W.H., Orr, D.B. et Vet, R.J. *Acidic Precipitation in Ontario Study - An Overview: The Cumulative Wet/Dry Deposition Network*, rapport n° ARB-164-84-ARSP, ministère de l'Environnement de l'Ontario, 1984.

Identification des stations

On identifie les stations selon quatre paramètres (par exemple, Dorset/Cumulative/LoVol/#20). Le premier paramètre est le lieu d'échantillonnage. Les deuxième et troisième paramètres décrivent la fréquence de l'échantillonnage et l'appareil utilisé. Finalement, le quatrième paramètre correspond au code numérique figurant sur le plan.

Listes des concentrations cumulées dans l'air ambiant

Chaque dispositif de filtrage se compose d'un filtre Whatman 40, d'un filtre de nylon et de deux filtres Whatman 41. Les deux premiers sont des filtres amont et les deux autres, des filtres aval. Le filtre Whatman 40 sert à mesurer les particules de SO_4 , NO_3 et autres ainsi que certains métaux à l'état de trace; le filtre de nylon, à mesurer les concentrations de HNO_3 gazeux; le filtre Whatman 41 (imbibé de K_2CO_3 - glycérol), à mesurer la présence de SO_2 gazeux. Depuis 1985, le paramètre « Sulphur Dioxide » (anhydride sulfureux) est corrigé par l'addition des sulfates relevés sur le filtre de nylon. Dans ce cas-ci, la concentration de soufre est considérée comme de l'anhydride sulfureux. Il est possible toutefois que des composés sulfuriques organiques se soient mélangés au soufre. À l'heure actuelle, il n'existe pas de méthodes permettant, au cours des opérations de routine, de quantifier leur apport. Le paramètre « TOTL NO_3 » représente l'ensemble des nitrates; c'est la somme des concentrations de N- HNO_3 et de N- NO_3 . Leur valeur individuelle n'est pas consignée, à cause des phénomènes parasites susceptibles d'intervenir dans le filtre utilisé. Avant 1986, si, au moment de calculer le paramètre « TOTL NO_3 », un seuil de détection intervenait, on le calculait à partir d'une valeur correspondant à la moitié du seuil. Cette valeur n'est plus coupée de moitié. Les codes (U et A, par exemple) inscrits à la suite de chaque résultat sont définis dans une autre section du rapport.

Index des codes d'observation sur place

- A - Défaillance de l'échantillonneur
- B - Panne d'électricité (connue/probable)
- C - Débit suspect
- D - Contamination (connue/probable)
- E - Pose incorrecte du filtre
- F - Échantillon manquant
- Q - Autre

Index des codes d'observation à partir de la station

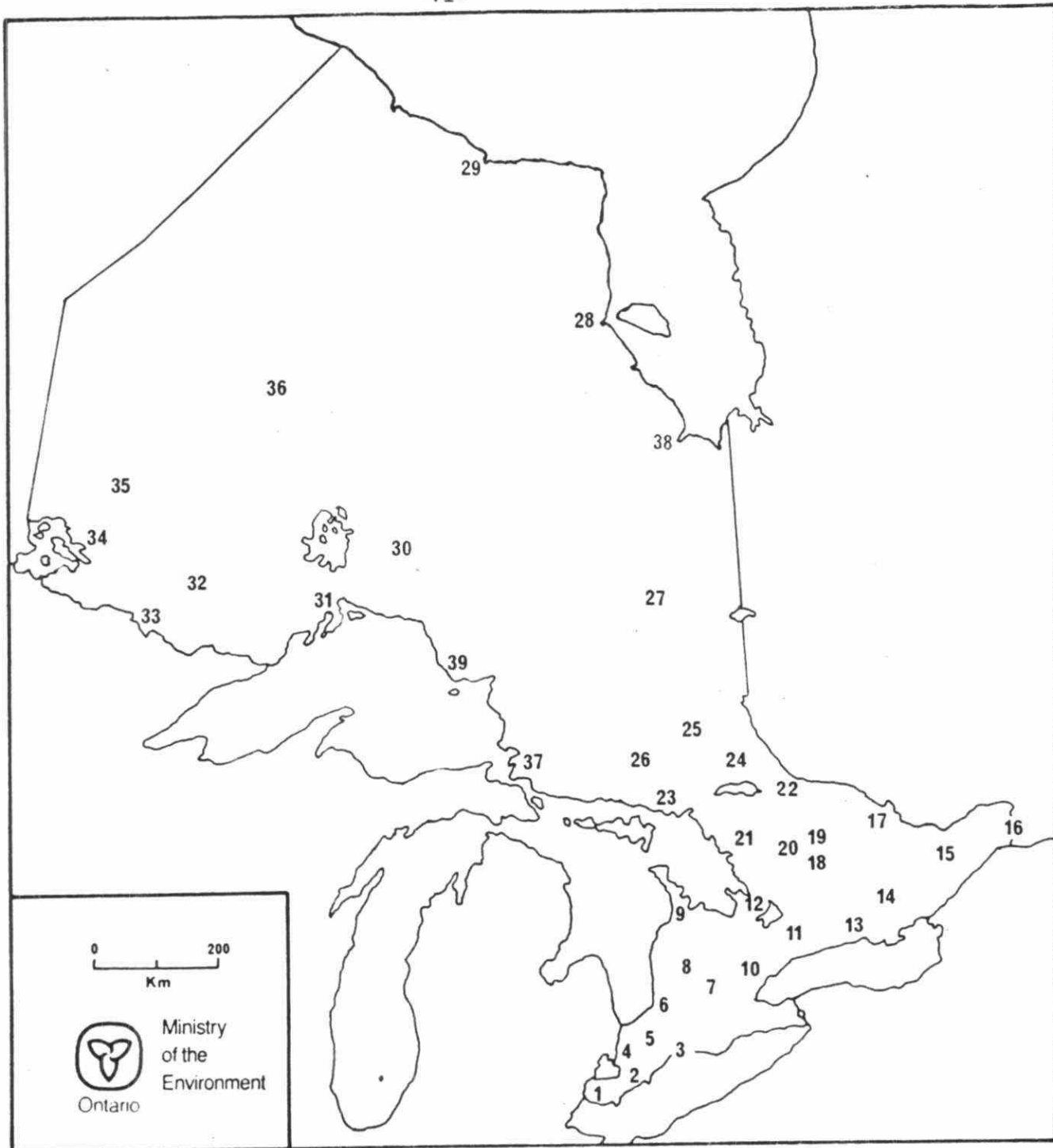
- F - Données invalides - le débit quotidien moyen est inférieur ou supérieur à $(2880 + 50 \%)$ litres par jour
- Z - Période d'échantillonnage anormale

Index des codes pour les résultats

- > - résultat réel supérieur à la valeur inscrite
- < - résultat réel inférieur à la valeur inscrite
- <T - résultat réel inférieur au critère de détection
- <W - réponse nulle, résultat minimal inscrit
- A - valeur approximative
- U - résultat non fiable
- D - cas déviant du test de rapports Dixon

PART II

STATION DESCRIPTION AND LOCATION MAP



- | | | |
|---|--|---|
| 1. Colchester* | 15. Smith's Falls* | 29. Winisk (rem. Dec '86) |
| 2. Merlin | 16. Dalhousie Mills* | 30. Geraldton (replaced
Nakina, Aug '83) |
| 3. Pt. Stanley* | 17. Golden Lake* | 31. Dorion* |
| 4. Wilkesport* | 18. Wilberforce | 32. Quetico Centre* |
| 5. Alvinston | 19. Whitney | 33. Lac la Croix |
| 6. Huron Park | 20. Dorset* | 34. Experimental Lakes Area |
| 7. Waterloo | 21. McKellar* | 35. Ear Falls* |
| 8. Palmerston* | 22. Mattawa* | 36. Pickle Lake* |
| 9. Shallow Lake* | 23. Killarney* | 37. Turkey Lake* |
| 10. Milton (removed
March '84) | 24. Bear Island | 38. Moosonee* (installed
October '85) |
| 11. Uxbridge* | 25. Gowganda* | 39. Otter Island*
(summer only) |
| 12. Coldwater | 26. Azure Lake (repl.
Ramsey, June '83) | 40. Sutton, Quebec
(Intercomparison
Site) |
| 13. Campbellford* | 27. Moonbeam* | |
| 14. Cloyne* (repl.
Kalladar, June '83) | 28. Attawapiskat
(rem. Feb '84) | |

* indicates both a wet and dry deposition network site

APIOS CUMULATIVE WET AND DRY DEPOSITION NETWORK SITE DESCRIPTIONS

<u>MOE REGION</u>	<u>STATION NAME</u>	<u>ELEVATION</u> (m above MSL)	<u>LATITUDE</u> (North)	<u>LONGITUDE</u> (West)	<u>UTM GRID CO-ORDINANTS</u> (Northing) (Easting)	
Southwestern	Colchester	183	41°59'15"	82°55'41"	4650000	340300
	Alvinston	221	42°49'36"	81°50'04"	4942000	431550
	Pt. Stanley	213	42°40'22"	81°09'55"	4724050	486700
	Huron Park	250	43°17'28"	81°30'03"	4793000	459350
	Wilkesport	183	42°42'11"	82°21'13"	4728350	389150
	Merlin	191	42°14'47"	82°13'30"	4676400	398950
	Shallow Lake	229	44°34'54"	8°05'24"	4936200	492850
	Palmerston	389	43°48'19"	80°54'12"	4850050	507750
	Waterloo	343	43°28'39"	80°35'09"	4813750	533500
Central	Dorset	320	45°13'26"	78°55'52"	5009650	662400
	Coldwater	280	44°37'31"	79°32'08"	4942200	615900
	Milton	221	43°31'05"	79°55'54"	4818600	586350
	Uxbridge	244	44°12'46"	79°12'38"	4896800	643000
	Campbellford	175	44°17'28"	77°47'33"	4907600	277150
	Wilberforce	396	45°00'54"	78°12'58"	4988150	719400
Southeastern	Smith's Falls	122	44°56'41"	75°57'48"	4977100	423950
	Dalhousie Mills	69	45°19'00"	74°28'13"	5018100	541550
	Golden Lake	160	45°36'48"	77°12'03"	5053200	328400
	Cloyne	259	44°49'09"	77°11'45"	4964750	327100
Northeastern	McKellar	244	45°30'57"	79°55'19"	5040600	583950
	Azure Lake	244	47°28'12"	81°52'30"	5257650	434250
	Killarney	183	45°59'26"	81°29'18"	5092900	462200
	Bear Island	305	46°58'22"	80°04'40"	5202400	570350
	Mattawa	198	46°16'45"	78°49'19"	5127150	667800
	Gowganda	343	47°39'04"	80°46'32"	5277300	516600
	Moonbeam	244	49°19'16"	82°08'46"	5463600	416650
	Moosonee	4	51°12'35"	80°42'20"	5673000	520550
	Turkey Lake	472	47°03'15"	84°24'00"	5214250	696750
	Whitney	412	45°32'21"	78°15'35"	5045950	713950
Northwestern	Attawapiskat	9	52°56'00"	82°24'00"	NA	NA
	Otter Island	204	48°06'50"	86°04'25"	5328750	569500
	Dorion	244	48°50'33"	88°36'45"	5410800	382150
	E.L.A.	123	49°39'22"	93°43'28"	5500950	447350
	Geraldton	351	49°48'05"	86°46'00"	5516300	516750
	Lac La Croix	368	48°21'14"	92°12'32"	5355900	558400
	Ear Falls	350	50°38'31"	93°13'13"	5609800	484150
	Quetico Centre	420	48°44'24"	91°12'08"	5399750	632100
	Pickle Lake	360	51°27'41"	90°12'04"	5704800	694550
	Winisk	9	55°12'00"	85°08'00"	NA	NA
Quebec	Sutton	243	45°04'35"	72°40'35"	4995100	680950

PART III

SOUTHWESTERN REGION CUMULATIVE AMBIENT AIR CONCENTRATION RESULTS

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE/LO-VOL #1

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	815	800	52340.0	74059	2	1	CQ	
FEB 25,86	JAN 28,86	800	740	81546.0	74081	2	1	ACQ	
MAR 25,86	FEB 25,86	740	720	79306.0	74103	2	1		
APR 22,86	MAR 25,86	730	800	47167.0	74129	2	1	B	
MAY 20,86	APR 22,86	800	700	63650.0	74145	2	1	B	
JUN 17,86	MAY 20,86	700	730	64296.0	74161	2	1	B	
JUL 15,86	JUN 17,86	730	820	64790.0	74167	2	1	B	
AUG 12,86	JUL 15,86	820	800	30158.0	74183	2	1	AB	F
SEP 9,86	AUG 12,86	800	730	19035.0	74221	2	1	A	F
OCT 7,86	SEP 9,86	730	800	68503.0	74227	2	1	B	
NOV 4,86	OCT 7,86	800	710	67767.0	74241	2	1	B	
DEC 2,86	NOV 4,86	720	715	79451.0	74265	2	1		
DEC 30,86	DEC 2,86	730	800	86186.0	74281	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	15.69	2.06	1.137	1.433	0.502	0.096	0.406
FEB 25,86	JAN 28,86	U 8.44	U 11.18	1.963	1.036	0.701	0.069	U 11.160
MAR 25,86	FEB 25,86	10.63	5.45	1.441	1.002	0.706	0.168	0.083
APR 22,86	MAR 25,86	3.77	5.30	1.506	0.721	0.975	0.246	0.103
MAY 20,86	APR 22,86	U 1.10	U 12.57	1.673	U 5.467	1.178	0.314	U 192.100
JUN 17,86	MAY 20,86	5.60	8.79	1.692	0.723	0.836	0.207	0.111
JUL 15,86	JUN 17,86	4.09	7.59	1.401	0.810	0.988	0.235	0.208
AUG 12,86	JUL 15,86	4.35	9.48	1.567	1.194	0.932	0.240	0.149
SEP 9,86	AUG 12,86	44.39	30.73	4.058	2.653	2.627	0.623	D 1.085
OCT 7,86	SEP 9,86	4.87	6.89	0.982	0.606	0.433	<T 0.113	0.100
NOV 4,86	OCT 7,86	12.14	5.43	1.217	0.686	0.660	<T 0.140	0.110
DEC 2,86	NOV 4,86	14.00	4.91	1.227	0.900	0.453	0.113	0.165
DEC 30,86	DEC 2,86	15.63	5.55	1.422	0.893	0.548	0.154	0.100

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : COLCHESTER/CUMULATIVE/LO-VOL

#1

PAGE : 2

REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMINIUM UG/M**3	LEAD UG/M**3	MANGANESE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.482	0.176	0.122	0.031	0.0096	0.0017	0.00248
FEB 25,86	JAN 28,86	0.267	0.163	0.113	0.067	0.0061	0.0018	0.00245
MAR 25,86	FEB 25,86	0.286	0.191	0.103	0.033	0.0126	0.0032	0.01009
APR 22,86	MAR 25,86	0.109	0.276	0.272	0.040	0.0136	0.0036	0.00615
MAY 20,86	APR 22,86	0.240	0.367	0.322	0.042	0.0196	D 0.0170	0.01210
JUN 17,86	MAY 20,86	0.094	0.250	0.182	0.042	0.0148	0.0053	0.00093
JUL 15,86	JUN 17,86	0.100	0.338	0.299	0.041	0.0190	0.0045	0.00340
AUG 12,86	JUL 15,86	0.166	0.269	0.191	0.035	0.0172	0.0066	0.01161
SEP 9,86	AUG 12,86	0.381	0.809	0.801	0.113	0.0452	0.0194	0.00946
OCT 7,86	SEP 9,86	0.126	0.126	0.092	0.028	0.0086	0.0025	<T 0.00102
NOV 4,86	OCT 7,86	0.118	0.201	0.155	0.015	0.0145	0.0037	<T 0.00148
DEC 2,86	NOV 4,86	0.130	0.145	0.093	0.030	0.0087	0.0035	0.00113
DEC 30,86	DEC 2,86	0.186	0.151	0.129	0.024	0.0103	0.0037	0.00081

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0011	0.031	0.00052	1.8150
FEB 25,86	JAN 28,86	0.0017	0.037	0.00049	U 5.2120
MAR 25,86	FEB 25,86	< 0.0003	0.058	0.00076	1.2860
APR 22,86	MAR 25,86	0.0013	0.057	0.00117	0.6572
MAY 20,86	APR 22,86	0.0035	0.053	0.00306	U 1.0840
JUN 17,86	MAY 20,86	0.0031	0.051	0.00121	1.5400
JUL 15,86	JUN 17,86	0.0023	0.066	0.00140	1.6820
AUG 12,86	JUL 15,86	0.0023	0.088	0.00209	2.8520
SEP 9,86	AUG 12,86	0.0068	0.165	0.00446	D 6.3040
OCT 7,86	SEP 9,86	<T 0.0018	0.042	0.00061	1.1530
NOV 4,86	OCT 7,86	<T 0.0018	0.035	0.00091	0.5017
DEC 2,86	NOV 4,86	0.0014	0.043	0.00112	D 0.2769
DEC 30,86	DEC 2,86	0.0014	0.049	0.00088	0.2901

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE/LO-VOL #8

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	1300	1300	77068.0	74069	2	1		
FEB 25,86	JAN 28,86	1300	1300	*****	74091	2	1	AGF	
MAR 25,86	FEB 25,86	1300	1300	5769.0	74108	2	1	AC	F
APR 22,86	MAR 25,86	1300	1300	22410.0	74134	2	1	A	F
MAY 22,86	APR 22,86	1300	1000	76527.0	74150	2	1		Z
JUN 17,86	MAY 22,86	1300	1300	64737.0	74166	2	1	B	Z
JUL 21,86	JUN 17,86	1300	1300	88390.0	74172	2	1		Z
AUG 13,86	JUL 21,86	1300	1300	58356.0	74188	2	1		Z
SEP 9,86	AUG 13,86	1300	1300	52866.0	74226	2	1	AC	
OCT 7,86	SEP 9,86	1300	1300	31275.0	74231	2	1	BC	F
NOV 5,86	OCT 7,86	1300	1300	77139.0	74245	2	1		
DEC 2,86	NOV 5,86	1300	1300	75816.0	74269	2	1		
DEC 30,86	DEC 2,86	1400	900	72288.0	74286	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	13.46	D 2.47	1.129	0.610	0.406	D 0.119	0.201
FEB 25,86	JAN 28,86	*****	*****	*****	*****	*****	*****	*****
MAR 25,86	FEB 25,86	U 8.15	U 10.05	2.167	U 2.773	U 1.595	U 0.303	U 0.043
APR 22,86	MAR 25,86	1.25	4.10	1.037	0.625	0.669	0.127	0.118
MAY 22,86	APR 22,86	U 0.74	U 8.00	1.454	0.588	1.751	D 0.581	U 28.090
JUN 17,86	MAY 22,86	1.73	6.87	1.035	0.386	0.956	D 0.321	0.097
JUL 21,86	JUN 17,86	U 0.84	U 9.59	0.865	0.441	0.758	0.255	U 13.920
AUG 13,86	JUL 21,86	1.08	5.04	0.685	0.377	0.728	0.242	0.227
SEP 9,86	AUG 13,86	2.52	7.15	1.069	0.624	0.965	D 0.268	0.252
OCT 7,86	SEP 9,86	1.83	3.77	0.895	D 0.608	<T 0.270	<T 0.067	0.301
NOV 5,86	OCT 7,86	3.63	4.43	1.241	0.415	0.432	<T 0.105	0.092
DEC 2,86	NOV 5,86	9.22	4.55	1.345	0.640	0.468	0.109	0.081
DEC 30,86	DEC 2,86	10.57	5.09	1.477	0.546	0.230	0.046	0.070

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PALMERSTON/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.186	0.106	0.060	0.028	0.0052	0.0016	0.00182
FEB 25,86	JAN 28,86	*****	*****	*****	*****	*****	*****	*****
MAR 25,86	FEB 25,86	U 0.537	U 1.820	U 0.170	U 0.023	U 0.0087	U 0.0347	U 0.15250
APR 22,86	MAR 25,86	0.150	0.160	0.209	0.025	0.0089	0.0067	0.01071
MAY 22,86	APR 22,86	0.101	0.350	0.386	0.034	0.0124	0.0082	0.00536
JUN 17,86	MAY 22,86	0.063	0.212	0.190	0.027	0.0113	0.0036	0.00077
JUL 21,86	JUN 17,86	0.076	0.205	0.228	0.023	0.0115	0.0017	0.00713
AUG 13,86	JUL 21,86	0.064	0.124	0.114	0.016	0.0082	0.0026	0.00274
SEP 9,86	AUG 13,86	0.109	0.165	0.286	0.028	0.0098	0.0038	0.00189
OCT 7,86	SEP 9,86	0.122	<T 0.084	<T 0.060	0.022	<T 0.0115	0.0051	0.00384
NOV 5,86	OCT 7,86	0.104	0.120	0.098	0.021	D 0.0404	0.0035	0.00156
DEC 2,86	NOV 5,86	0.145	0.126	0.110	0.040	0.0071	0.0032	0.00237
DEC 30,86	DEC 2,86	0.162	0.093	0.078	0.002	0.0079	0.0026	0.00138

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0014	0.015	0.00048	1.7000
FEB 25,86	JAN 28,86	*****	*****	*****	*****
MAR 25,86	FEB 25,86	U 0.0035	U 0.043	U 0.00468	U 7.8000
APR 22,86	MAR 25,86	0.0013	0.056	0.00129	0.6693
MAY 22,86	APR 22,86	0.0014	0.024	0.00102	U 0.7579
JUN 17,86	MAY 22,86	0.0015	0.015	0.00029	0.6797
JUL 21,86	JUN 17,86	0.0016	0.020	0.00055	U 1.0860
AUG 13,86	JUL 21,86	0.0007	0.021	0.00043	0.7197
SEP 9,86	AUG 13,86	0.0015	0.020	D 0.00123	1.1730
OCT 7,86	SEP 9,86	<W 0.0016	0.022	0.00061	1.0230
NOV 5,86	OCT 7,86	<T 0.0014	0.019	0.00051	0.3759
DEC 2,86	NOV 5,86	0.0021	0.024	0.00073	0.3297
DEC 30,86	DEC 2,86	0.0017	0.023	0.00068	0.4980

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE/LO-VOL #3

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REMOVAL DATE	EXPOSURE DATE	SAMPLING		FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	COMMENTS	
		START HR.	END HR.			02-APIOS 03-SPECIAL	01-MOE 03-AES 04-ON HYDRO	FIELD	OFFICE
JAN 28,86	DEC 31,85	930	900	92990.0	74061	2	1		
FEB 25,86	JAN 28,86	900	900	78836.0	74083	2	1		
MAR 25,86	FEB 25,86	900	900	80260.0	74104	2	1		
APR 22,86	MAR 25,86	900	900	76500.0	74130	2	1		
MAY 20,86	APR 22,86	900	900	77180.0	74146	2	1		
JUN 17,86	MAY 20,86	900	900	67328.0	74162	2	1	B	
JUL 15,86	JUN 17,86	900	1030	84280.0	74168	2	1	B	
AUG 12,86	JUL 15,86	1030	930	71645.0	74184	2	1		
SEP 9,86	AUG 12,86	930	1030	72286.0	74222	2	1		
OCT 7,86	SEP 9,86	1030	930	48792.0	74228	2	1	AC	
NOV 4,86	OCT 7,86	930	930	78633.0	74242	2	1		
DEC 2,86	NOV 4,86	930	930	82887.0	74266	2	1		
DEC 30,86	DEC 2,86	930	900	82973.0	74282	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	12.74	1.91	0.981	0.624	0.572	0.066	0.127
FEB 25,86	JAN 28,86	11.53	3.74	1.791	0.748	0.682	0.065	1.091
MAR 25,86	FEB 25,86	12.62	6.54	1.548	0.822	0.660	0.128	0.070
APR 22,86	MAR 25,86	3.27	3.33	0.967	0.346	0.510	0.099	0.063
MAY 20,86	APR 22,86	1.92	3.86	0.972	0.518	0.842	0.207	4.729
JUN 17,86	MAY 20,86	1.72	4.60	0.861	0.475	0.345	0.075	0.062
JUL 15,86	JUN 17,86	U 0.31	U 7.59	0.670	1.720	0.320	0.060	U 20.760
AUG 12,86	JUL 15,86	1.75	4.09	0.569	0.391	0.257	0.054	0.080
SEP 9,86	AUG 12,86	2.78	4.08	0.636	0.429	0.401	0.071	0.102
OCT 7,86	SEP 9,86	1.37	2.09	0.487	0.420	<T 0.196	<W 0.041	0.539
NOV 4,86	OCT 7,86	D 2.94	D 2.42	0.779	0.401	0.333	<T 0.046	D 0.058
DEC 2,86	NOV 4,86	12.87	3.80	1.101	0.688	0.388	0.082	0.099
DEC 30,86	DEC 2,86	16.65	2.71	1.133	0.687	0.174	0.031	0.046

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : PORT STANLEY/CUMULATIVE/LO-VOL #3

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.170	0.156	0.171	0.038	0.0075	0.0012	0.00172
FEB 25,86	JAN 28,86	0.271	0.205	0.151	0.060	0.0089	0.0022	0.00254
MAR 25,86	FEB 25,86	0.302	0.191	0.117	0.032	0.0131	0.0066	0.01420
APR 22,86	MAR 25,86	0.063	0.192	0.181	0.026	0.0114	0.0026	0.00366
MAY 20,86	APR 22,86	0.087	0.356	0.369	0.030	0.0207	0.0048	0.00259
JUN 17,86	MAY 20,86	0.062	0.020	0.151	0.017	0.0094	0.0050	0.00045
JUL 15,86	JUN 17,86	D 0.475	0.114	0.117	0.015	0.0062	0.0014	0.00736
AUG 12,86	JUL 15,86	0.070	0.107	0.101	0.014	0.0064	0.0025	0.00293
SEP 9,86	AUG 12,86	0.080	0.115	0.183	0.016	0.0062	0.0019	0.00111
OCT 7,86	SEP 9,86	0.100	<T 0.045	<T 0.031	D 0.042	<T 0.0059	0.0031	<T 0.00143
NOV 4,86	OCT 7,86	0.089	0.102	0.060	0.026	0.0067	0.0018	0.00153
DEC 2,86	NOV 4,86	0.126	0.141	0.089	0.027	0.0074	0.0035	0.00121
DEC 30,86	DEC 2,86	0.117	0.067	0.047	0.010	0.0047	0.0022	0.00036

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0011	0.013	0.00035	1.4950
FEB 25,86	JAN 28,86	0.0018	0.022	0.00044	3.3610
MAR 25,86	FEB 25,86	< 0.0002	0.041	0.00047	0.5607
APR 22,86	MAR 25,86	0.0008	0.031	0.00065	0.4575
MAY 20,86	APR 22,86	0.0012	0.027	0.00130	0.5831
JUN 17,86	MAY 20,86	0.0013	0.015	0.00027	1.1140
JUL 15,86	JUN 17,86	0.0014	0.012	0.00059	0.4627
AUG 12,86	JUL 15,86	0.0010	0.015	0.00045	1.3680
SEP 9,86	AUG 12,86	0.0007	0.007	0.00235	1.3970
OCT 7,86	SEP 9,86	<W 0.0010	0.011	<T 0.00012	0.7993
NOV 4,86	OCT 7,86	<T 0.0009	D 0.017	0.00029	0.5596
DEC 2,86	NOV 4,86	0.0018	D 0.024	0.00057	0.3378
DEC 30,86	DEC 2,86	0.0011	0.018	0.00045	D 1.4700

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE/LO-VOL #9

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	900	815	86470.0	74067	2	1		
FEB 26,86	JAN 28,86	815	830	89400.0	74089	2	1		
MAR 25,86	FEB 26,86	830	845	83380.0	74107	2	1		
APR 22,86	MAR 25,86	845	800	87450.0	74133	2	1		
MAY 20,86	APR 22,86	830	700	85930.0	74149	2	1		
JUN 24,86	MAY 20,86	700	730	99740.0	74165	2	1		Z
JUL 19,86	JUN 24,86	730	830	73950.0	74171	2	1		Z
AUG 12,86	JUL 19,86	830	700	58290.0	74187	2	1		Z
SEP 9,86	AUG 12,86	700	700	113530.0	74225	2	1	C	
OCT 7,86	SEP 9,86	700	715	74770.0	74230	2	1		
NOV 5,86	OCT 7,86	715	830	75760.0	74244	2	1		
DEC 2,86	NOV 5,86	830	830	88280.0	74271	2	1		
DEC 31,86	DEC 2,86	830	1630	1900.0	74285	2	1	B	F

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	9.32	1.60	0.963	0.486	0.189	0.049	0.067
FEB 26,86	JAN 28,86	5.02	2.80	0.900	D 0.363	0.414	0.023	2.125
MAR 25,86	FEB 26,86	10.02	1.79	0.725	0.438	0.137	0.031	0.022
APR 22,86	MAR 25,86	1.71	2.72	0.592	0.234	0.452	0.098	0.048
MAY 20,86	APR 22,86	1.21	4.17	0.844	0.337	0.989	0.274	0.396
JUN 24,86	MAY 20,86	1.20	4.26	0.434	0.261	0.444	0.126	0.066
JUL 19,86	JUN 24,86	<T 0.41	3.22	0.257	0.257	0.252	0.055	0.304
AUG 12,86	JUL 19,86	<T 1.07	7.75	0.609	0.472	0.609	0.178	0.101
SEP 9,86	AUG 12,86	2.09	5.09	0.421	0.317	0.467	0.117	0.091
OCT 7,86	SEP 9,86	0.98	3.21	0.358	0.274	0.182	<T 0.055	0.646
NOV 5,86	OCT 7,86	2.33	3.17	0.746	0.264	0.312	<T 0.069	0.071
DEC 2,86	NOV 5,86	6.68	2.70	1.017	0.419	0.328	0.078	0.037
DEC 31,86	DEC 2,86	U 11.93	U 5.26	5.263	U 5.526	U 1.116	U 0.216	U 0.368

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SHALLOW LAKE/CUMULATIVE/LO-VOL #9

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.137	0.072	0.060	0.013	0.0040	0.0030	0.00185
FEB 26,86	JAN 28,86	0.129	0.043	0.035	0.051	0.0028	0.0025	0.00056
MAR 25,86	FEB 26,86	0.119	0.029	0.023	0.006	0.0018	0.0024	0.01055
APR 22,86	MAR 25,86	0.065	0.155	0.190	0.014	0.0072	0.0039	0.00217
MAY 20,86	APR 22,86	0.090	0.254	0.280	0.021	0.0146	0.0048	0.00361
JUN 24,86	MAY 20,86	0.049	0.124	0.142	0.016	0.0069	0.0057	0.00060
JUL 19,86	JUN 24,86	0.057	0.069	0.083	0.013	0.0037	0.0049	0.00487
AUG 12,86	JUL 19,86	0.103	0.209	0.219	0.009	0.0168	D 0.0103	0.00412
SEP 9,86	AUG 12,86	0.055	0.110	0.168	0.014	0.0070	0.0064	0.00097
OCT 7,86	SEP 9,86	0.094	<T 0.048	0.043	0.014	<T 0.0063	0.0045	<T 0.00134
NOV 5,86	OCT 7,86	0.095	0.083	0.078	0.030	<T 0.0057	0.0051	<T 0.00119
DEC 2,86	NOV 5,86	0.120	0.082	0.059	0.016	0.0056	0.0036	0.00147
DEC 31,86	DEC 2,86	U 2.526	U 0.647	U 0.437	U 0.026	U 0.0263	U 0.0263	U 0.00526

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0010	0.010	0.00043	1.3990
FEB 26,86	JAN 28,86	0.0020	0.001	0.00036	1.9910
MAR 25,86	FEB 26,86	< 0.0002	0.010	0.00046	1.3910
APR 22,86	MAR 25,86	0.0008	0.022	0.00051	0.3659
MAY 20,86	APR 22,86	0.0010	0.019	0.00077	0.5702
JUN 24,86	MAY 20,86	0.0012	0.007	0.00026	0.5414
JUL 19,86	JUN 24,86	0.0008	0.009	0.00018	0.4598
AUG 12,86	JUL 19,86	0.0014	0.030	0.00051	1.5610
SEP 9,86	AUG 12,86	0.0009	0.010	0.00039	0.4316
OCT 7,86	SEP 9,86	<W 0.0007	0.009	0.00027	0.5483
NOV 5,86	OCT 7,86	<T 0.0007	0.011	0.00040	0.4488
DEC 2,86	NOV 5,86	0.0010	0.020	0.00066	0.6797
DEC 31,86	DEC 2,86	U 0.0105	U 0.026	U 0.00632	U *****

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILKESPORT/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING		FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE	SUBPROJECT CODE	COMMENTS	
		START HR.	END HR.			02-APIOS 03-SPECIAL	01-MOE 03-AES 04-ON HYDRO	FIELD	OFFICE
JAN 28,86	DEC 31,85	1000	1245	65770.0	74065	2	1	B	
FEB 25,86	JAN 28,86	1245	1230	75495.0	74087	2	1		
MAR 25,86	FEB 25,86	1230	1230	54931.0	74106	2	1	AC	
APR 22,86	MAR 25,86	1245	1245	49878.0	74132	2	1	B	
MAY 20,86	APR 22,86	1245	1300	59607.0	74148	2	1	BQ	
JUN 17,86	MAY 20,86	1300	1300	72333.0	74164	2	1		
JUL 15,86	JUN 17,86	1300	1745	86950.0	74170	2	1		
AUG 12,86	JUL 15,86	1745	1400	67023.0	74186	2	1		
SEP 9,86	AUG 12,86	1400	1130	60413.0	74224	2	1	B	
OCT 7,86	SEP 10,86	1500	1100	52080.0	74229	2	1	C	
NOV 5,86	OCT 7,86	1100	1000	75190.0	74243	2	1		
DEC 2,86	NOV 5,86	1100	1100	73433.0	74267	2	1		
DEC 30,86	DEC 2,86	1100	1700	81524.0	74283	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	18.35	3.04	1.144	0.890	0.558	0.084	0.099
FEB 25,86	JAN 28,86	9.66	10.09	1.987	1.212	0.769	0.073	U 22.090
MAR 25,86	FEB 25,86	13.79	6.23	1.557	1.211	0.783	0.120	0.075
APR 22,86	MAR 25,86	3.97	4.57	1.178	0.642	0.832	0.146	0.065
MAY 20,86	APR 22,86	4.26	6.41	1.611	0.805	2.047	0.377	U 8.120
JUN 17,86	MAY 20,86	5.94	9.82	1.586	0.802	1.136	0.300	0.096
JUL 15,86	JUN 17,86	4.51	5.84	0.883	0.581	0.669	0.152	0.141
AUG 12,86	JUL 15,86	6.00	7.53	0.895	0.791	0.739	0.151	0.220
SEP 9,86	AUG 12,86	6.29	7.86	0.853	0.662	0.836	0.146	0.143
OCT 7,86	SEP 10,86	4.49	6.30	0.869	0.710	0.336	<T 0.074	0.260
NOV 5,86	OCT 7,86	12.56	5.32	1.164	0.572	0.939	0.182	0.108
DEC 2,86	NOV 5,86	15.64	5.07	1.175	0.797	0.763	0.146	0.104
DEC 30,86	DEC 2,86	15.16	6.03	1.264	0.761	0.419	0.084	0.107

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : WILKESPORT/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.251	0.153	0.132	0.026	0.0068	0.0020	0.00426
FEB 25,86	JAN 28,86	D 0.408	0.144	0.108	0.070	0.0066	0.0023	D 0.00397
MAR 25,86	FEB 25,86	0.373	D 0.134	0.102	0.029	0.0146	0.0040	0.01784
APR 22,86	MAR 25,86	0.117	0.226	0.234	0.029	0.0100	0.0042	0.00762
MAY 20,86	APR 22,86	0.759	0.451	0.487	0.036	0.0193	0.0052	0.02215
JUN 17,86	MAY 20,86	0.091	0.288	0.285	0.039	0.0138	0.0079	0.00290
JUL 15,86	JUN 17,86	0.086	0.253	0.257	0.033	0.0136	0.0039	0.00403
AUG 12,86	JUL 15,86	0.123	0.238	0.239	0.029	0.0143	0.0054	0.00373
SEP 9,86	AUG 12,86	0.099	0.182	0.253	0.025	0.0088	0.0043	0.00348
OCT 7,86	SEP 10,86	0.155	0.114	0.098	0.027	0.0104	0.0029	<T 0.00154
NOV 5,86	OCT 7,86	0.112	0.269	0.258	0.025	0.0153	0.0044	0.00186
DEC 2,86	NOV 5,86	0.142	0.178	0.106	0.035	0.0084	0.0035	0.00218
DEC 30,86	DEC 2,86	0.205	0.183	0.109	0.028	0.0133	0.0045	0.00209

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0017	0.021	0.00050	1.8700
FEB 25,86	JAN 28,86	D 0.0030	0.031	0.00064	U 9.8020
MAR 25,86	FEB 25,86	< 0.0004	0.048	0.00080	0.8920
APR 22,86	MAR 25,86	0.0024	0.045	0.00096	0.6015
MAY 20,86	APR 22,86	0.0023	0.047	0.00117	U 0.7717
JUN 17,86	MAY 20,86	0.0048	0.040	0.00094	0.9401
JUL 15,86	JUN 17,86	0.0045	0.030	0.00066	1.0120
AUG 12,86	JUL 15,86	0.0045	0.041	0.00985	1.1940
SEP 9,86	AUG 12,86	0.0018	0.022	0.00113	1.3900
OCT 7,86	SEP 10,86	<T 0.0027	0.028	0.00069	1.4980
NOV 5,86	OCT 7,86	<T 0.0028	0.034	0.00045	0.5453
DEC 2,86	NOV 5,86	0.0030	0.044	0.00083	0.3404
DEC 30,86	DEC 2,86	0.0029	0.063	0.00114	0.2944

PART IV

CENTRAL REGION CUMULATIVE AMBIENT AIR CONCENTRATION RESULTS

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE/LO-VOL #13

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD OFFICE
JAN 28,86	DEC 31,85	1310	1740	47140.0	94196	2	1	AC
FEB 25,86	JAN 28,86	1740	1730	*****	94202	2	1	FA
MAR 26,86	FEB 25,86	1730	1830	69317.0	94208	2	1	Q
APR 23,86	MAR 26,86	1830	1715	81960.0	94214	2	1	QD
MAY 20,86	APR 23,86	1715	1640	80257.0	94220	2	1	Q
JUN 17,86	MAY 20,86	1640	1615	80713.0	94239	2	1	Q
JUL 15,86	JUN 17,86	1615	1015	82050.0	94287	2	1	Q
AUG 12,86	JUL 15,86	1015	1900	*****	94293	2	1	EQF
SEP 9,86	AUG 12,86	1900	1615	62921.0	94303	2	1	
OCT 7,86	SEP 9,86	1615	1800	78059.0	94308	2	1	A
NOV 4,86	OCT 7,86	1800	1900	74361.0	94319	2	1	
DEC 2,86	NOV 4,86	1900	1630	84449.0	94321	2	1	
DEC 30,86	DEC 2,86	1630	1628	64882.0	94329	2	1	

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	4.67	1.70	0.949	0.721	0.670	0.045	0.514
FEB 25,86	JAN 28,86	*****	*****	*****	*****	*****	*****	*****
MAR 26,86	FEB 25,86	U 1.91	U 7.39	1.165	0.599	0.664	0.079	U 5.843
APR 23,86	MAR 26,86	1.49	2.81	0.531	0.275	0.824	0.074	0.143
MAY 20,86	APR 23,86	U 0.50	U 6.58	0.729	0.399	2.168	0.212	U 5.084
JUN 17,86	MAY 20,86	1.12	4.11	0.477	0.328	1.821	0.118	0.601
JUL 15,86	JUN 17,86	<T 0.63	5.06	0.515	0.353	D 4.168	D 0.199	1.694
AUG 12,86	JUL 15,86	*****	*****	*****	*****	*****	*****	*****
SEP 9,86	AUG 12,86	U 1.00	U 8.34	0.656	0.493	1.629	0.096	U 4.307
OCT 7,86	SEP 9,86	1.39	3.20	0.375	0.256	0.446	0.037	1.249
NOV 4,86	OCT 7,86	1.29	3.43	0.531	0.222	0.625	0.028	> 4.034
DEC 2,86	NOV 4,86	<W 0.79	0.69	0.252	0.160	0.118	0.003	0.035
DEC 30,86	DEC 2,86	15.14	7.52	1.036	0.385	0.327	0.017	0.823

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CAMPBELLFORD/CUMULATIVE/LO-VOL #13

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.337	0.108	D 0.082	0.041	0.0064	0.0062	D 0.00806
FEB 25,86	JAN 28,86	*****	*****	*****	*****	*****	*****	*****
MAR 26,86	FEB 25,86	0.289	0.126	0.107	0.026	0.0094	0.0033	0.02164
APR 23,86	MAR 26,86	0.101	0.147	0.172	0.020	0.0078	0.0026	0.00293
MAY 20,86	APR 23,86	0.212	0.313	0.343	0.030	0.0143	0.0047	0.00349
JUN 17,86	MAY 20,86	0.087	0.202	0.254	0.026	0.0110	0.0047	D 0.00186
JUL 15,86	JUN 17,86	0.098	0.266	0.324	0.030	0.0172	0.0034	0.00146
AUG 12,86	JUL 15,86	*****	*****	*****	*****	*****	*****	*****
SEP 9,86	AUG 12,86	0.191	0.185	0.225	0.029	0.0087	D 0.0132	0.00556
OCT 7,86	SEP 9,86	0.041	0.066	0.066	0.027	0.0056	0.0074	0.00077
NOV 4,86	OCT 7,86	0.219	0.096	0.076	0.040	0.0047	0.0073	0.00148
DEC 2,86	NOV 4,86	0.063	0.027	0.014	0.009	0.0006	0.0014	0.00095
DEC 30,86	DEC 2,86	0.173	0.069	0.044	0.030	0.0060	0.0023	0.00185

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0019	0.011	0.00059	D 3.0970
FEB 25,86	JAN 28,86	*****	*****	*****	*****
MAR 26,86	FEB 25,86	0.0003	0.017	0.00062	U 1.0100
APR 23,86	MAR 26,86	0.0009	0.019	0.00061	0.7321
MAY 20,86	APR 23,86	0.0010	0.022	0.00052	U 0.6355
JUN 17,86	MAY 20,86	0.0011	0.011	0.00038	0.7929
JUL 15,86	JUN 17,86	0.0009	0.012	0.00077	0.9019
AUG 12,86	JUL 15,86	*****	*****	*****	*****
SEP 9,86	AUG 12,86	0.0013	0.021	0.00041	U 1.1920
OCT 7,86	SEP 9,86	0.0008	0.008	0.00021	1.0500
NOV 4,86	OCT 7,86	0.0011	0.022	0.00082	1.2240
DEC 2,86	NOV 4,86	0.0002	0.001	0.00025	1.1840
DEC 30,86	DEC 2,86	0.0011	0.016	0.00086	U *****

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD OFFICE
JAN 28,86	DEC 31,85	1236	1450	82055.0	29519	2	1	
FEB 25,86	JAN 28,86	1548	1350	82540.0	29527	2	1	
MAR 25,86	FEB 25,86	1351	912	82431.0	29538	2	1	
APR 22,86	MAR 25,86	913	1001	80227.0	29547	2	1	
MAY 20,86	APR 22,86	1003	920	77684.0	29556	2	1	
JUN 17,86	MAY 20,86	923	904	73063.0	29565	2	1	BA
JUL 15,86	JUN 17,86	908	915	82721.0	29578	2	1	
AUG 12,86	JUL 15,86	935	1142	72026.0	29586	2	1	
SEP 9,86	AUG 12,86	1144	1206	77320.0	29594	2	1	
OCT 7,86	SEP 9,86	1208	1046	82633.0	29598	2	1	
NOV 4,86	OCT 7,86	1046	1410	76265.0	29607	2	1	
DEC 2,86	NOV 4,86	1413	1400	76909.0	29618	2	1	
DEC 30,86	DEC 2,86	1401	1400	76657.0	29628	2	1	

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	7.77	2.34	0.600	0.256	0.113	0.030	0.085
FEB 25,86	JAN 28,86	3.98	2.85	0.491	0.121	0.368	0.018	0.160
MAR 25,86	FEB 25,86	2.25	3.58	0.555	0.212	0.153	0.051	0.050
APR 22,86	MAR 25,86	1.57	2.34	0.346	0.174	0.239	0.049	0.041
MAY 20,86	APR 22,86	1.19	3.54	0.418	0.193	0.362	0.091	0.048
JUN 17,86	MAY 20,86	1.11	2.63	0.287	0.082	0.207	0.053	0.069
JUL 15,86	JUN 17,86	<T	0.71	0.205	0.097	0.189	0.053	0.075
AUG 12,86	JUL 15,86	<T	0.87	0.271	0.090	0.153	0.040	0.073
SEP 9,86	AUG 12,86		1.46	0.272	0.097	0.165	0.039	0.096
OCT 7,86	SEP 9,86		1.19	0.182	0.085	0.088	0.023	0.050
NOV 4,86	OCT 7,86		2.61	0.377	0.112	0.155	<W	0.047
DEC 2,86	NOV 4,86	<W	0.82	0.650	0.175	0.175	0.046	0.090
DEC 30,86	DEC 2,86	D	4.16	0.613	0.117	0.090	0.022	0.063

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORSET/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.192	0.055	0.025	0.011	0.0030	0.0041	0.00292
FEB 25,86	JAN 28,86	0.147	0.033	0.020	0.042	0.0036	0.0035	0.00170
MAR 25,86	FEB 25,86	0.206	0.069	0.037	0.015	0.0036	0.0033	0.01686
APR 22,86	MAR 25,86	0.090	0.117	0.199	0.015	0.0061	0.0036	0.00499
MAY 20,86	APR 22,86	0.122	0.207	0.235	0.015	0.0073	0.0026	0.00335
JUN 17,86	MAY 20,86	0.075	0.113	0.126	0.015	0.0057	0.0023	0.00041
JUL 15,86	JUN 17,86	0.063	0.121	0.135	0.009	0.0046	0.0021	0.00036
AUG 12,86	JUL 15,86	0.073	0.101	0.136	0.015	0.0043	0.0012	0.00236
SEP 9,86	AUG 12,86	0.136	0.097	0.132	0.007	0.0054	0.0031	0.00103
OCT 7,86	SEP 9,86	0.128	0.034	0.035	0.007	0.0025	0.0018	0.00061
NOV 4,86	OCT 7,86	U 0.102	<T 0.059	0.049	0.028	<T 0.0025	0.0033	0.00157
DEC 2,86	NOV 4,86	0.354	0.061	0.041	0.019	0.0057	0.0029	0.00091
DEC 30,86	DEC 2,86	0.125	0.039	0.037	0.012	0.0027	D 0.0021	0.00222

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0009	0.014	0.00073	0.5119
FEB 25,86	JAN 28,86	0.0016	0.013	0.00050	0.5210
MAR 25,86	FEB 25,86	< 0.0002	0.015	0.00039	0.6066
APR 22,86	MAR 25,86	0.0025	0.011	0.00060	0.4487
MAY 20,86	APR 22,86	0.0009	0.020	0.00021	0.4377
JUN 17,86	MAY 20,86	0.0003	0.007	0.00056	0.9307
JUL 15,86	JUN 17,86	0.0005	D 0.006	0.00045	0.9188
AUG 12,86	JUL 15,86	0.0004	0.019	0.00018	1.1800
SEP 9,86	AUG 12,86	0.0034	0.008	0.00047	1.4870
OCT 7,86	SEP 9,86	0.0006	0.009	0.00053	0.9560
NOV 4,86	OCT 7,86	<T 0.0007	0.007	0.00042	0.9703
DEC 2,86	NOV 4,86	0.0008	0.014	0.00059	1.2350
DEC 30,86	DEC 2,86	0.0005	0.012	0.00061	1.4480

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	JAN 7,86	1130	800	57020.0	40325	2	1		Z
FEB 25,86	JAN 28,86	800	1225	79000.0	40329	2	1		
MAR 25,86	FEB 25,86	1225	1055	81350.0	40333	2	1		
APR 22,86	MAR 25,86	1055	1100	77800.0	40337	2	1	B	
MAY 21,86	APR 22,86	1100	1230	85860.0	40340	2	1		
JUN 17,86	MAY 21,86	1230	1130	76520.0	40345	2	1		
JUL 16,86	JUN 17,86	1130	1100	82220.0	40348	2	1		
AUG 14,86	JUL 16,86	1100	1100	28210.0	40352	2	1	B	F
SEP 11,86	AUG 14,86	1100	1100	76660.0	40355	2	1		
OCT 2,86	SEP 11,86	1100	1600	*****	40358	2	1	BF	Z
NOV 17,86	OCT 2,86	1600	1130	*****	40459	2	1	BF	Z
DEC 4,86	NOV 17,86	1130	1115	20870.0	40519	2	1		FZ
DEC 30,86	DEC 4,86	1130	1045	21025.0	40525	2	1	A	FZ

REMOVAL DATE	EXPOSURE DATE		SULPHUR DIOXIDE UG/M**3		SULPHATE UG/M**3		TOTAL N -NITRATE UG/M**3		CHLORIDE UG/M**3		CALCIUM UG/M**3		MAGNESIM UG/M**3		POTASSIM UG/M**3
JAN 28,86	JAN 7,86	U	2.24	U	11.19	U	1.070	U	2.771		0.466		0.049	U	43.840
FEB 25,86	JAN 28,86	U	5.51	U	4.40		0.905		0.506		0.339		0.026	U	7.443
MAR 25,86	FEB 25,86		10.90		2.52		0.986		0.467		0.962		0.081		0.098
APR 22,86	MAR 25,86		3.07		3.73		0.611		0.482		0.707		0.047		0.123
MAY 21,86	APR 22,86	D	2.83		2.04		0.673		0.239		1.537		0.163		0.030
JUN 17,86	MAY 21,86		2.04		2.29		0.572		0.261		0.791		0.090		0.083
JUL 16,86	JUN 17,86		1.54		1.36		0.401		0.255		0.507		0.074		0.065
AUG 14,86	JUL 16,86	D	3.28		4.43		0.904		0.656		0.746		0.069		0.186
SEP 11,86	AUG 14,86		3.59		2.78		0.470		0.326		0.730		0.057		0.110
OCT 2,86	SEP 11,86		*****		*****		*****		*****		*****		*****		*****
NOV 17,86	OCT 2,86		*****		*****		*****		*****		*****		*****		*****
DEC 4,86	NOV 17,86		8.43		2.49		0.994		0.647		0.867		0.012		0.783
DEC 30,86	DEC 4,86		4.19		1.66		0.642		0.404		0.195		0.012		0.271

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : UXBRIDGE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE		SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	JAN 7,86		0.333	0.091	0.079	0.011	0.0053	0.0051	0.00754
FEB 25,86	JAN 28,86		0.203	0.059	0.048	0.034	0.0044	0.0018	0.00228
MAR 25,86	FEB 25,86		0.510	0.136	0.116	0.054	0.0061	0.0028	0.00246
APR 22,86	MAR 25,86	U	3.792	0.155	0.153	0.007	0.0055	D 0.0546	0.01658
MAY 21,86	APR 22,86		0.019	0.362	0.362	0.024	0.0105	0.0056	0.00128
JUN 17,86	MAY 21,86	D	0.367	0.166	0.173	0.023	0.0085	0.0021	0.00078
JUL 16,86	JUN 17,86		0.032	0.129	0.173	0.012	0.0061	0.0019	0.00036
AUG 14,86	JUL 16,86	D	0.416	0.160	0.217	0.029	0.0096	0.0018	0.00603
SEP 11,86	AUG 14,86		0.075	0.103	0.121	0.013	0.0077	0.0027	0.00130
OCT 2,86	SEP 11,86		*****	*****	*****	*****	*****	*****	*****
NOV 17,86	OCT 2,86		*****	*****	*****	*****	*****	*****	*****
DEC 4,86	NOV 17,86		0.299	0.107	0.074	0.025	0.0024	0.0259	0.00240
DEC 30,86	DEC 4,86		0.335	0.073	0.044	0.010	0.0024	0.0019	0.00666

REMOVAL DATE	EXPOSURE DATE		VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	JAN 7,86	<	0.0004	0.018	0.00123	U 2.3330
FEB 25,86	JAN 28,86		0.0013	0.008	0.00047	U 1.8990
MAR 25,86	FEB 25,86		0.0017	0.016	0.00048	2.0650
APR 22,86	MAR 25,86	<	0.0003	0.043	0.00057	D 1.9410
MAY 21,86	APR 22,86		0.0015	0.017	0.00028	D 1.5140
JUN 17,86	MAY 21,86		0.0008	0.014	0.00055	2.0780
JUL 16,86	JUN 17,86	D	0.0004	0.011	0.00013	1.8000
AUG 14,86	JUL 16,86		0.0007	0.018	0.00057	4.1830
SEP 11,86	AUG 14,86	D	0.0034	0.012	0.00039	D 3.2740
OCT 2,86	SEP 11,86		*****	*****	*****	*****
NOV 17,86	OCT 2,86		*****	*****	*****	*****
DEC 4,86	NOV 17,86		0.0010	0.009	0.00081	2.8750
DEC 30,86	DEC 4,86		0.0010	0.002	0.00090	1.9980

PART V

SOUTHEASTERN REGION CUMULATIVE AMBIENT AIR CONCENTRATION RESULTS

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE/LO-VOL #16

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	800	800	77646.0	94199	2	1		
FEB 25,86	JAN 28,86	800	800	69050.0	94205	2	1		
MAR 25,86	FEB 25,86	800	800	64000.0	94211	2	1	A	
APR 22,86	MAR 25,86	800	1800	*****	94217	2	1	AF	
MAY 20,86	APR 22,86	1800	800	78687.0	94223	2	1		
JUN 17,86	MAY 20,86	900	800	27460.0	94242	2	1	A	F
JUL 15,86	JUN 17,86	900	900	*****	94290	2	1	QAF	
AUG 12,86	JUL 15,86	900	800	78942.0	94295	2	1		
SEP 9,86	AUG 12,86	900	800	81860.0	94300	2	1		
OCT 7,86	SEP 9,86	900	800	86034.0	94306	2	1		
NOV 4,86	OCT 7,86	900	800	61050.0	94315	2	1		
DEC 2,86	NOV 4,86	800	800	66810.0	94325	2	1	C	
DEC 30,86	DEC 2,86	900	800	90680.0	94331	2	1	QD	

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	6.18	2.38	0.972	0.844	0.754	0.080	0.354
FEB 25,86	JAN 28,86	3.36	5.82	1.409	1.311	2.345	0.128	1.999
MAR 25,86	FEB 25,86	D 6.86	5.34	1.059	0.883	0.625	0.097	0.328
APR 22,86	MAR 25,86	*****	*****	*****	*****	*****	*****	*****
MAY 20,86	APR 22,86	1.43	3.91	0.667	0.432	1.176	0.184	0.213
JUN 17,86	MAY 20,86	U 1.26	U 3.35	0.628	0.674	0.803	0.089	U 3.423
JUL 15,86	JUN 17,86	*****	*****	*****	*****	*****	*****	*****
AUG 12,86	JUL 15,86	U 0.62	U 6.87	0.564	0.336	0.640	0.076	U 4.142
SEP 9,86	AUG 12,86	1.48	4.22	0.388	0.287	0.919	0.092	0.214
OCT 7,86	SEP 9,86	0.85	2.61	0.413	0.273	0.459	0.059	0.151
NOV 4,86	OCT 7,86	1.64	2.95	0.586	0.426	0.704	0.045	0.156
DEC 2,86	NOV 4,86	U 1.39	U 5.27	0.778	0.479	0.846	0.080	U 3.532
DEC 30,86	DEC 2,86	2.00	4.94	0.791	1.031	0.785	0.091	2.404

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DALHOUSIE MILLS/CUMULATIVE/LO-VOL #16

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMINIUM UG/M**3	LEAD UG/M**3	MANGANESE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.476	0.113	0.096	0.075	D 0.0303	0.0089	0.00219
FEB 25,86	JAN 28,86	0.817	0.238	0.214	0.164	0.0478	0.0046	0.00507
MAR 25,86	FEB 25,86	0.529	0.127	0.110	0.041	< 0.0547	0.0033	0.06687
APR 22,86	MAR 25,86	*****	*****	*****	*****	*****	*****	*****
MAY 20,86	APR 22,86	0.197	0.336	0.402	0.048	0.0261	0.0047	0.00432
JUN 17,86	MAY 20,86	D 0.215	0.185	0.177	0.030	0.0113	D 0.0109	D 0.00364
JUL 15,86	JUN 17,86	*****	*****	*****	*****	*****	*****	*****
AUG 12,86	JUL 15,86	0.139	0.132	0.131	0.040	0.0156	0.0024	0.00266
SEP 9,86	AUG 12,86	0.104	0.149	0.213	0.029	0.0138	0.0140	0.00379
OCT 7,86	SEP 9,86	0.104	0.114	0.083	0.044	D 0.0349	0.0049	0.00604
NOV 4,86	OCT 7,86	0.187	0.108	0.092	0.048	0.0262	0.0067	0.00229
DEC 2,86	NOV 4,86	0.257	0.149	0.149	0.036	0.0202	0.0043	0.00374
DEC 30,86	DEC 2,86	0.506	0.147	0.110	0.046	0.0210	0.0047	0.00209

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0035	D 0.027	0.00057	1.4810
FEB 25,86	JAN 28,86	0.0090	0.042	0.00074	0.6951
MAR 25,86	FEB 25,86	< 0.0003	D 0.030	0.00072	0.4531
APR 22,86	MAR 25,86	*****	*****	*****	*****
MAY 20,86	APR 22,86	0.0030	0.035	0.00091	0.2796
JUN 17,86	MAY 20,86	0.0025	0.017	D 0.00215	U 1.7840
JUL 15,86	JUN 17,86	*****	*****	*****	*****
AUG 12,86	JUL 15,86	0.0027	0.019	0.00062	U 0.9374
SEP 9,86	AUG 12,86	0.0026	0.016	0.00044	0.7574
OCT 7,86	SEP 9,86	0.0026	D 0.037	0.00055	0.9996
NOV 4,86	OCT 7,86	0.0020	0.021	0.00098	1.3100
DEC 2,86	NOV 4,86	0.0037	D 0.031	D 0.00103	U 1.6310
DEC 30,86	DEC 2,86	0.0056	0.031	0.00077	0.8271

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE/LO-VOL #17

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	1230	700	75876.0	94200	2	1		
FEB 26,86	JAN 28,86	705	700	88369.0	94206	2	1	Q	
MAR 25,86	FEB 26,86	705	700	78922.0	94212	2	1	Q	
APR 22,86	MAR 25,86	700	700	79110.0	94218	2	1		
MAY 20,86	APR 22,86	705	705	79653.0	94224	2	1		
JUN 17,86	MAY 20,86	1700	1700	73711.0	94243	2	1	Q	
JUL 15,86	JUN 17,86	1705	630	34311.0	94291	2	1	Q	F
AUG 12,86	JUL 15,86	635	700	21390.0	94298	2	1		F
SEP 9,86	AUG 12,86	705	730	72634.0	94301	2	1		
OCT 7,86	SEP 9,86	735	715	80440.0	94307	2	1		
NOV 4,86	OCT 7,86	720	730	5938.0	94320	2	1	A	F
DEC 2,86	NOV 4,86	735	720	61830.0	94324	2	1		
DEC 30,86	DEC 2,86	725	1200	61108.0	24584	2	1		

REMOVAL DATE	EXPOSURE DATE		SULPHUR DIOXIDE UG/M**3		SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	U	2.03	U	7.12	0.633	1.911	0.322	0.051	U 26.360
FEB 26,86	JAN 28,86		3.67		2.55	0.467	0.357	0.454	0.036	0.085
MAR 25,86	FEB 26,86	U	1.13	U	6.02	0.494	0.405	0.141	0.058	U 6.589
APR 22,86	MAR 25,86	U	0.44	U	3.85	0.319	0.266	0.341	0.070	U 8.583
MAY 20,86	APR 22,86	U	0.35	U	5.71	0.323	0.270	0.320	0.093	U 8.945
JUN 17,86	MAY 20,86	U	0.22	U	3.66	0.064	0.407	0.183	0.047	U 14.650
JUL 15,86	JUN 17,86	U	0.66	U	4.60	0.117	2.040	0.200	0.067	U 16.370
AUG 12,86	JUL 15,86	U	0.50	U	1.17	1.928	0.771	0.213	0.039	U 35.880
SEP 9,86	AUG 12,86	<W	2.66		3.99	0.272	0.124	0.192	0.041	0.385
OCT 7,86	SEP 9,86		0.87		1.80	0.131	0.118	0.105	0.024	0.091
NOV 4,86	OCT 7,86	U	10.22	U	3.03	1.095	U 1.431	U 0.733	U 0.042	U 1.474
DEC 2,86	NOV 4,86		1.95		3.04	0.724	0.275	0.304	0.060	0.073
DEC 30,86	DEC 2,86		1.91		3.44	0.650	0.262	0.161	0.037	0.781

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOLDEN LAKE/CUMULATIVE/LO-VOL #17

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.337	0.055	0.032	0.022	0.0086	0.0037	0.00198
FEB 26,86	JAN 28,86	0.210	0.050	0.044	0.066	0.0045	0.0049	0.00170
MAR 25,86	FEB 26,86	0.253	0.127	0.035	0.024	0.0076	D 0.0075	0.02851
APR 22,86	MAR 25,86	0.110	0.139	0.173	0.011	0.0062	0.0030	0.00442
MAY 20,86	APR 22,86	0.107	0.152	0.161	0.017	0.0063	0.0049	0.00678
JUN 17,86	MAY 20,86	0.088	0.101	0.112	0.009	0.0053	0.0033	0.00109
JUL 15,86	JUN 17,86	0.160	0.110	0.112	0.014	0.0079	0.0047	0.00087
AUG 12,86	JUL 15,86	0.245	0.090	0.097	0.018	0.0070	D 0.0528	D 0.02010
SEP 9,86	AUG 12,86	0.089	0.078	0.112	0.011	0.0040	0.0091	0.00358
OCT 7,86	SEP 9,86	0.056	0.036	0.038	0.010	0.0032	0.0031	0.00522
NOV 4,86	OCT 7,86	U 0.707	U 0.216	U 0.074	U 0.037	U 0.0084	U 0.0101	U 0.00842
DEC 2,86	NOV 4,86	0.183	0.092	0.076	0.027	0.0104	0.0049	0.00243
DEC 30,86	DEC 2,86	0.234	0.056	0.045	0.024	0.0062	0.0047	0.00360

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0016	0.013	0.00087	U 1.8850
FEB 26,86	JAN 28,86	0.0026	0.012	0.00038	0.3848
MAR 25,86	FEB 26,86	< 0.0003	0.011	0.00061	U 0.5195
APR 22,86	MAR 25,86	0.0008	0.014	0.00077	U 0.5309
MAY 20,86	APR 22,86	0.0010	0.011	0.00074	U 0.5273
JUN 17,86	MAY 20,86	0.0009	0.007	0.00053	U 0.3256
JUL 15,86	JUN 17,86	0.0006	0.008	0.00146	U 0.9909
AUG 12,86	JUL 15,86	0.0023	D 0.045	D 0.00262	U 0.7480
SEP 9,86	AUG 12,86	0.0011	0.011	0.00041	D 3.9930
OCT 7,86	SEP 9,86	0.0007	0.003	0.00044	0.8578
NOV 4,86	OCT 7,86	U 0.0034	U 0.015	U 0.00320	U 5.2210
DEC 2,86	NOV 4,86	0.0018	0.016	0.00061	1.1320
DEC 30,86	DEC 2,86	0.0021	0.021	0.00080	1.9640

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE/LO-VOL #15

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	1014	1050	84448.0	94198	2	1		
FEB 25,86	JAN 28,86	1050	1350	30355.0	94204	2	1	A	F
MAR 25,86	FEB 25,86	1350	1050	42540.0	94210	2	1	Q	
APR 22,86	MAR 25,86	1050	1100	89840.0	94216	2	1		
MAY 20,86	APR 22,86	1100	1130	56050.0	94222	2	1	B	
JUN 17,86	MAY 20,86	1130	1105	83340.0	94241	2	1	B	
JUL 15,86	JUN 17,86	1105	1045	80900.0	94289	2	1		
AUG 12,86	JUL 15,86	1045	1730	68360.0	94299	2	1		
SEP 9,86	AUG 12,86	1730	840	81950.0	94305	2	1	Q	
OCT 7,86	SEP 9,86	940	1015	46670.0	94312	2	1	B	
NOV 4,86	OCT 7,86	1015	1325	93930.0	94313	2	1		
DEC 2,86	NOV 4,86	1325	940	77220.0	94323	2	1	C	
DEC 30,86	DEC 2,86	940	1315	*****	94326	2	1	QF	

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	3.09	3.88	0.814	0.989	0.486	0.165	7.135
FEB 25,86	JAN 28,86	2.17	3.46	0.939	1.186	1.739	0.250	0.972
MAR 25,86	FEB 25,86	U	15.00	1.317	0.811	0.987	D	21.980
APR 22,86	MAR 25,86	0.55	2.67	0.409	0.306	1.002	0.295	0.121
MAY 20,86	APR 22,86	U	8.17	1.129	0.714	1.954	D	14.720
JUN 17,86	MAY 20,86	<T	2.88	0.360	0.306	1.308	D	0.840
JUL 15,86	JUN 17,86	U	4.94	0.392	0.389	0.486	D	0.141
AUG 12,86	JUL 15,86	<T	5.75	0.453	0.234	0.600	0.177	0.951
SEP 9,86	AUG 12,86	U	5.73	0.470	0.323	0.757	0.202	2.977
OCT 7,86	SEP 9,86	<W	2.79	0.471	0.225	0.414	0.121	0.471
NOV 4,86	OCT 7,86	0.72	3.67	0.641	0.229	0.644	D	2.928
DEC 2,86	NOV 4,86	0.66	2.78	0.722	0.304	0.583	0.015	0.166
DEC 30,86	DEC 2,86	*****	*****	*****	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : SMITH'S FALLS/CUMULATIVE/LO-VOL #15

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.563	0.098	0.069	0.075	0.0089	0.0015	0.00130
FEB 25,86	JAN 28,86	0.865	0.142	0.154	0.186	0.1664	0.0016	0.00659
MAR 25,86	FEB 25,86	0.394	0.183	0.121	0.035	0.0153	0.0042	0.00306
APR 22,86	MAR 25,86	0.150	0.241	0.291	0.019	0.0119	0.0027	0.00356
MAY 20,86	APR 22,86	0.321	0.306	0.299	0.052	0.0401	0.0064	0.00553
JUN 17,86	MAY 20,86	0.099	0.212	0.252	0.026	0.0151	0.0026	0.00108
JUL 15,86	JUN 17,86	0.105	0.126	0.130	0.026	0.0087	0.0033	0.00210
AUG 12,86	JUL 15,86	0.110	0.126	0.092	0.026	0.0101	0.0054	0.00351
SEP 9,86	AUG 12,86	0.125	0.135	0.174	0.029	0.0118	0.0049	0.00354
OCT 7,86	SEP 9,86	0.101	0.095	0.076	0.039	0.0090	0.0032	0.00150
NOV 4,86	OCT 7,86	0.152	0.113	0.076	0.042	0.0101	0.0023	0.00128
DEC 2,86	NOV 4,86	0.192	0.105	0.086	0.041	0.0123	0.0023	0.00142
DEC 30,86	DEC 2,86	*****	*****	*****	*****	*****	*****	*****

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0034	0.012	0.00028	1.5750
FEB 25,86	JAN 28,86	0.0072	0.026	0.00063	1.0870
MAR 25,86	FEB 25,86	0.0005	0.012	0.00103	U 0.7522
APR 22,86	MAR 25,86	0.0012	0.020	0.00047	0.2449
MAY 20,86	APR 22,86	0.0029	0.033	0.00121	U 1.7130
JUN 17,86	MAY 20,86	0.0016	0.009	0.00029	0.6479
JUL 15,86	JUN 17,86	0.0005	0.008	0.00093	U 0.8900
AUG 12,86	JUL 15,86	0.0015	0.020	0.00059	1.3460
SEP 9,86	AUG 12,86	0.0015	0.013	0.00041	U 0.9152
OCT 7,86	SEP 9,86	0.0011	0.010	0.00049	D 2.5930
NOV 4,86	OCT 7,86	0.0014	0.017	0.00061	0.9688
DEC 2,86	NOV 4,86	0.0019	0.015	0.00063	0.8547
DEC 30,86	DEC 2,86	*****	*****	*****	*****

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	755	1650	123825.0	94201	2	1	C	F
FEB 25,86	JAN 28,86	1650	1650	97009.0	94207	2	1		
MAR 25,86	FEB 25,86	1650	1730	157552.0	94213	2	1	QC	F
APR 22,86	MAR 25,86	1730	720	38070.0	94219	2	1	B	F
MAY 20,86	APR 22,86	720	1730	29430.0	94225	2	1	C	F
JUN 17,86	MAY 21,86	1225	1810	75771.0	94244	2	1	Q	
JUL 15,86	JUN 17,86	1810	1800	63518.0	94292	2	1		
AUG 12,86	JUL 15,86	1800	1730	71816.0	94296	2	1		
SEP 9,86	AUG 12,86	1730	700	71438.0	94304	2	1		
OCT 7,86	SEP 9,86	1900	1915	11133.0	94311	2	1	AC	F
NOV 4,86	OCT 7,86	1915	440	51325.0	94316	2	1		
DEC 2,86	NOV 4,86	450	530	64115.0	94327	2	1		
DEC 30,86	DEC 2,86	530	930	63343.0	94328	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	3.14	1.74	0.759	0.363	0.314	0.046	U 4.131
FEB 25,86	JAN 28,86	4.34	3.28	0.655	0.500	0.375	0.031	0.152
MAR 25,86	FEB 25,86	2.99	2.21	0.314	0.219	0.127	0.031	0.047
APR 22,86	MAR 25,86	2.06	2.84	0.440	0.341	0.447	0.060	D 0.393
MAY 20,86	APR 22,86	1.29	3.74	0.484	0.425	0.593	0.139	0.289
JUN 17,86	MAY 21,86	0.70	2.53	0.238	0.238	0.267	0.063	0.479
JUL 15,86	JUN 17,86	0.83	4.22	0.276	0.370	0.240	0.067	1.197
AUG 12,86	JUL 15,86	1.19	6.38	0.320	0.153	0.208	0.033	0.118
SEP 9,86	AUG 12,86	1.98	4.13	0.245	0.147	0.280	0.061	0.185
OCT 7,86	SEP 9,86	U 11.53	U 3.77	0.606	*****	U 1.100	U 0.184	U 26.950
NOV 4,86	OCT 7,86	2.93	3.51	0.687	0.292	0.322	0.029	0.132
DEC 2,86	NOV 4,86	9.49	3.56	0.784	0.359	0.411	0.087	0.183
DEC 30,86	DEC 2,86	14.38	3.95	0.825	0.331	0.201	0.018	0.278

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : CLOYNE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.275	0.076	0.064	0.067	0.0052	0.0028	0.00121
FEB 25,86	JAN 28,86	0.384	0.069	0.050	0.056	0.0113	0.0019	0.00258
MAR 25,86	FEB 25,86	0.149	0.063	0.036	< 0.012	0.0038	0.0037	0.01428
APR 22,86	MAR 25,86	0.148	0.164	0.191	0.015	0.0068	0.0039	0.00762
MAY 20,86	APR 22,86	0.195	0.308	0.314	0.022	0.0136	0.0092	D 0.14100
JUN 17,86	MAY 21,86	0.081	0.136	0.142	0.015	0.0073	0.0030	0.00066
JUL 15,86	JUN 17,86	0.094	0.128	0.130	0.020	0.0074	0.0022	0.00063
AUG 12,86	JUL 15,86	0.104	0.081	0.078	0.025	0.0049	0.0021	0.00404
SEP 9,86	AUG 12,86	0.084	0.097	0.170	0.016	0.0048	0.0060	0.00434
OCT 7,86	SEP 9,86	U 1.028	U 0.249	U 0.350	U 0.062	U 0.0198	U 0.0350	U 0.21560
NOV 4,86	OCT 7,86	0.200	0.088	0.059	0.038	0.0058	0.0037	D 0.00370
DEC 2,86	NOV 4,86	0.237	0.146	0.084	0.035	0.0078	D 0.0120	D 0.00733
DEC 30,86	DEC 2,86	0.218	0.083	0.035	0.044	0.0081	0.0033	0.00158

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0044	0.015	0.00035	1.5340
FEB 25,86	JAN 28,86	D 0.0294	0.014	0.00040	D 0.3917
MAR 25,86	FEB 25,86	< 0.0001	0.010	0.00030	0.2793
APR 22,86	MAR 25,86	0.0013	0.025	0.00113	0.6830
MAY 20,86	APR 22,86	0.0007	0.018	0.00139	0.7136
JUN 17,86	MAY 21,86	D 0.0049	0.007	0.00028	0.3827
JUL 15,86	JUN 17,86	0.0008	0.009	0.00085	0.5353
AUG 12,86	JUL 15,86	0.0011	0.013	0.00036	1.2250
SEP 9,86	AUG 12,86	0.0015	0.011	0.00035	1.2740
OCT 7,86	SEP 9,86	U 0.0332	U 0.029	U 0.00602	U 2.3350
NOV 4,86	OCT 7,86	0.0016	0.019	0.00123	1.4420
DEC 2,86	NOV 4,86	0.0019	0.036	0.00094	U *****
DEC 30,86	DEC 2,86	0.0017	0.018	0.00065	U *****

PART VI

NORTHEASTERN REGION CUMULATIVE AMBIENT AIR CONCENTRATION RESULTS

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE/LO-VOL

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PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	805	1610	95708.0	35732	2	1		
FEB 25,86	JAN 28,86	1610	945	87654.0	35780	2	1		
MAR 25,86	FEB 25,86	945	1030	86247.0	35802	2	1		
APR 22,86	MAR 25,86	1030	810	75474.0	35829	2	1		
MAY 20,86	APR 22,86	810	1110	44803.0	35857	2	1	A	
JUN 17,86	MAY 20,86	1110	1010	76124.0	35902	2	1		
JUL 15,86	JUN 17,86	1010	1130	80959.0	35970	2	1		
AUG 12,86	JUL 15,86	1130	1400	81805.0	36035	2	1		
SEP 9,86	AUG 12,86	1400	1025	84940.0	36150	2	1		
OCT 7,86	SEP 9,86	1025	1237	89737.0	36229	2	1		
NOV 4,86	OCT 7,86	1237	1115	91352.0	36286	2	1		
DEC 2,86	NOV 4,86	1115	1005	72238.0	36371	2	1	A	
DEC 30,86	DEC 2,86	1005	1100	72390.0	36457	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	2.94	1.88	0.324	0.209	0.080	0.035	0.063
FEB 25,86	JAN 28,86	4.26	2.42	0.160	0.160	0.185	0.020	0.088
MAR 25,86	FEB 25,86	2.10	2.45	0.186	0.278	0.089	0.043	0.052
APR 22,86	MAR 25,86	4.60	1.88	0.209	0.199	0.159	0.050	0.076
MAY 20,86	APR 22,86	3.39	2.68	0.313	0.257	0.268	0.085	0.095
JUN 17,86	MAY 20,86	1.90	1.64	0.089	0.151	0.157	0.088	0.053
JUL 15,86	JUN 17,86	0.42	1.58	0.120	0.142	0.149	0.065	0.086
AUG 12,86	JUL 15,86	0.67	1.77	0.086	0.159	0.089	0.035	0.089
SEP 9,86	AUG 12,86	0.93	2.52	0.183	0.006	0.142	0.038	D 0.235
OCT 7,86	SEP 9,86	1.94	1.20	0.064	0.106	0.080	0.032	D 0.266
NOV 4,86	OCT 7,86	2.19	1.42	0.151	0.120	<T 0.074	<W 0.022	0.038
DEC 2,86	NOV 4,86	0.59	1.38	0.287	0.152	0.092	0.003	0.044
DEC 30,86	DEC 2,86	1.95	2.04	0.307	0.200	0.070	0.024	0.026

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GOWGANDA/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMINIUM UG/M**3	LEAD UG/M**3	MANGANESE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.211	0.038	0.017	0.013	0.0016	0.0037	0.00272
FEB 25,86	JAN 28,86	0.150	0.026	0.024	0.032	0.0023	0.0051	0.00182
MAR 25,86	FEB 25,86	0.243	0.051	0.041	0.009	0.0015	0.0070	0.01101
APR 22,86	MAR 25,86	0.103	0.136	0.220	0.016	0.0044	0.0082	0.00344
MAY 20,86	APR 22,86	0.131	0.179	0.201	0.015	0.0056	0.0067	0.00670
JUN 17,86	MAY 20,86	0.082	0.185	0.228	0.037	0.0051	0.0038	0.00079
JUL 15,86	JUN 17,86	0.067	0.153	0.207	0.006	0.0037	D 0.0044	0.00037
AUG 12,86	JUL 15,86	0.076	0.089	0.118	0.015	0.0029	0.0054	0.00208
SEP 9,86	AUG 12,86	0.074	0.088	0.078	0.009	0.0039	0.0034	0.00106
OCT 7,86	SEP 9,86	0.061	0.063	0.057	0.011	0.0012	0.0029	0.00111
NOV 4,86	OCT 7,86	0.078	<T 0.054	0.051	0.009	<T 0.0041	0.0067	0.00186
DEC 2,86	NOV 4,86	0.083	0.045	0.018	0.012	0.0012	0.0046	0.00138
DEC 30,86	DEC 2,86	0.132	0.027	0.029	0.007	0.0012	0.0043	0.00193

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0008	0.013	0.00070	0.2508
FEB 25,86	JAN 28,86	0.0016	0.010	0.00059	0.2624
MAR 25,86	FEB 25,86	< 0.0002	0.009	0.00042	0.3942
APR 22,86	MAR 25,86	0.0016	0.012	D 0.00113	0.5035
MAY 20,86	APR 22,86	0.0004	0.016	0.00094	0.6250
JUN 17,86	MAY 20,86	0.0003	0.011	D 0.00263	0.3153
JUL 15,86	JUN 17,86	0.0004	0.007	D 0.00052	0.2470
AUG 12,86	JUL 15,86	0.0002	0.004	0.00034	0.3789
SEP 9,86	AUG 12,86	0.0002	0.008	0.00039	0.3650
OCT 7,86	SEP 9,86	0.0003	0.009	0.00009	0.3120
NOV 4,86	OCT 7,86	<W 0.0005	0.009	0.00068	0.1970
DEC 2,86	NOV 4,86	0.0003	0.009	0.00075	0.2630
DEC 30,86	DEC 2,86	< 0.0003	0.007	0.00069	0.2763

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 27,86	JAN 7,86	1605	1420	61151.0	35736	2	1	B	Z
FEB 25,86	JAN 27,86	1420	1355	82945.0	35794	2	1		
MAR 25,86	FEB 25,86	1355	1142	82289.0	35810	2	1		
APR 22,86	MAR 25,86	1142	1038	80030.0	35837	2	1		
MAY 21,86	APR 22,86	1038	1050	81321.0	35864	2	1		
JUN 17,86	MAY 21,86	1050	1525	74250.0	35909	2	1		
JUL 14,86	JUN 17,86	1525	1120	49920.0	35976	2	1		
AUG 12,86	JUL 14,86	1120	1145	63431.0	36045	2	1	B	
SEP 10,86	AUG 12,86	1145	1128	80410.0	36158	2	1		
OCT 11,86	SEP 10,86	1128	1320	83300.0	36237	2	1		Z
NOV 4,86	OCT 11,86	1320	1700	66120.0	36294	2	1		Z
DEC 2,86	NOV 4,86	1700	1315	78090.0	36379	2	1		
JAN 4,87	DEC 2,86	1315	1044	92490.0	36465	2	1		Z

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 27,86	JAN 7,86	4.94	2.86	0.642	0.442	0.188	0.027	0.110
FEB 25,86	JAN 27,86	D 13.62	2.87	0.280	0.109	0.091	0.018	0.072
MAR 25,86	FEB 25,86	9.67	5.08	0.474	0.650	0.141	0.052	0.081
APR 22,86	MAR 25,86	6.13	2.15	0.319	0.250	0.211	0.046	0.044
MAY 21,86	APR 22,86	2.21	2.73	0.427	0.240	0.301	0.065	0.049
JUN 17,86	MAY 21,86	D 4.60	2.76	0.202	0.189	0.192	0.060	0.075
JUL 14,86	JUN 17,86	<T 0.49	2.50	0.301	0.290	0.218	0.043	0.069
AUG 12,86	JUL 14,86	0.76	2.71	0.213	0.237	0.170	0.036	0.051
SEP 10,86	AUG 12,86	2.38	3.63	0.311	0.236	0.206	0.040	0.059
OCT 11,86	SEP 10,86	1.97	1.78	0.210	0.162	0.126	0.023	0.044
NOV 4,86	OCT 11,86	D 5.82	2.87	0.423	0.265	<T 0.146	<W 0.030	0.057
DEC 2,86	NOV 4,86	4.22	2.50	0.615	0.314	0.188	0.027	0.131
JAN 4,87	DEC 2,86	4.78	2.81	0.584	0.146	0.078	0.022	0.052

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : KILLARNEY/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 27,86	JAN 7,86	0.221	0.078	0.025	0.011	0.0041	0.0051	0.00360
FEB 25,86	JAN 27,86	0.127	0.040	0.017	0.019	0.0030	0.0098	0.00350
MAR 25,86	FEB 25,86	0.247	0.063	0.047	0.015	0.0036	0.0038	0.01264
APR 22,86	MAR 25,86	0.103	0.110	0.177	0.019	0.0051	0.0065	0.00462
MAY 21,86	APR 22,86	0.095	0.141	0.176	0.017	0.0057	0.0027	0.00406
JUN 17,86	MAY 21,86	0.094	0.107	0.117	0.022	0.0050	0.0053	D 0.00216
JUL 14,86	JUN 17,86	D 0.100	0.085	0.072	0.012	0.0038	0.0026	0.00040
AUG 12,86	JUL 14,86	0.083	0.065	0.067	0.018	0.0027	0.0027	0.00299
SEP 10,86	AUG 12,86	0.075	0.091	0.072	0.014	0.0053	0.0058	0.00298
OCT 11,86	SEP 10,86	0.062	0.032	0.033	0.014	0.0024	0.0035	0.00108
NOV 4,86	OCT 11,86	0.101	<T 0.058	0.047	0.016	<T 0.0044	0.0080	0.00227
DEC 2,86	NOV 4,86	0.149	0.093	0.061	0.018	0.0035	0.0091	D 0.00320
JAN 4,87	DEC 2,86	0.101	0.036	0.033	0.009	0.0023	0.0032	0.00205

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 27,86	JAN 7,86	0.0011	0.014	0.00095	0.4252
FEB 25,86	JAN 27,86	0.0013	0.008	0.00078	0.3858
MAR 25,86	FEB 25,86	< 0.0002	0.013	0.00044	0.5225
APR 22,86	MAR 25,86	0.0019	0.016	0.00070	0.3499
MAY 21,86	APR 22,86	0.0009	0.017	0.00057	0.5657
JUN 17,86	MAY 21,86	0.0020	0.007	0.00135	0.5118
JUL 14,86	JUN 17,86	0.0006	0.009	0.00020	0.4407
AUG 12,86	JUL 14,86	0.0003	0.005	0.00017	0.4730
SEP 10,86	AUG 12,86	0.0005	0.010	0.00041	0.6342
OCT 11,86	SEP 10,86	0.0005	0.007	0.00011	0.3121
NOV 4,86	OCT 11,86	<W 0.0008	0.008	0.00073	0.4235
DEC 2,86	NOV 4,86	D 0.0006	0.008	0.00070	0.2433
JAN 4,87	DEC 2,86	0.0003	0.007	0.00058	0.2811

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MATTAWA/CUMULATIVE/LO-VOL

#22

PAGE : 1

REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 15,86	DEC 3,85	1310	1330	6548.0	35722	2	1	A	FZ
JAN 28,86	JAN 15,86	1330	1315	14784.0	35742	2	1	A	FZ
FEB 25,86	JAN 28,86	1315	1450	80840.0	35790	2	1		
MAR 25,86	FEB 25,86	1450	1430	78456.0	35808	2	1		
APR 22,86	MAR 25,86	1430	1135	77532.0	35835	2	1	D	
MAY 21,86	APR 22,86	1135	1150	83559.0	35862	2	1		
JUN 17,86	MAY 21,86	1150	1100	76997.0	35907	2	1		
JUL 15,86	JUN 17,86	1120	1430	79653.0	35974	2	1		
AUG 12,86	JUL 15,86	1430	1110	77501.0	36040	2	1		
SEP 9,86	AUG 12,86	1110	1045	75150.0	36155	2	1		
OCT 7,86	SEP 9,86	1045	1105	86027.0	36234	2	1		
NOV 4,86	OCT 7,86	1105	1310	92337.0	36291	2	1		
DEC 2,86	NOV 4,86	1310	1115	75579.0	36376	2	1		

REMOVAL DATE	EXPOSURE DATE		SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 15,86	DEC 3,85	U	111.80	U 11.91	3.513	U 1.374	U 0.649	U 0.107	U 8.018
JAN 28,86	JAN 15,86		12.09	2.37	0.507	0.981	0.551	0.095	0.254
FEB 25,86	JAN 28,86		5.20	0.37	0.263	0.210	0.062	< 0.003	0.040
MAR 25,86	FEB 25,86		3.58	3.09	0.296	0.344	0.138	0.082	0.056
APR 22,86	MAR 25,86		1.77	2.00	0.223	0.213	0.222	D 0.084	0.048
MAY 21,86	APR 22,86		1.03	2.99	0.215	0.203	0.263	0.111	0.057
JUN 17,86	MAY 21,86		1.02	1.71	0.088	0.247	0.396	0.450	D 0.107
JUL 15,86	JUN 17,86		0.49	2.32	0.126	0.238	0.190	0.149	0.083
AUG 12,86	JUL 15,86	<T	0.26	2.30	0.116	0.219	0.206	D 0.190	0.097
SEP 9,86	AUG 12,86		0.94	3.27	0.140	0.246	D 0.392	D 0.526	0.073
OCT 7,86	SEP 9,86		0.88	1.57	0.064	0.145	0.169	D 0.238	0.060
NOV 4,86	OCT 7,86		1.73	2.04	0.200	0.157	0.184	D 0.181	0.066
DEC 2,86	NOV 4,86		3.16	2.05	0.318	0.218	0.164	0.025	0.048

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MATTAWA/CUMULATIVE/LO-VOL

#22

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REMOVAL DATE	EXPOSURE DATE		SODIUM UG/M**3		IRON UG/M**3		ALUMNIUM UG/M**3		LEAD UG/M**3		MANGANSE UG/M**3		COPPER UG/M**3		NICKEL UG/M**3
JAN 15,86	DEC 3,85	U	1.031	U	0.275	U	0.173	U	0.122	U	0.0382	U	0.0519	U	0.02902
JAN 28,86	JAN 15,86		0.744		0.135		0.049		0.039		0.0068		0.0074		0.01150
FEB 25,86	JAN 28,86		0.060		0.015		0.009		0.006		0.0012		0.0010		0.00124
MAR 25,86	FEB 25,86		0.284	D	0.171	D	0.172		0.018	D	0.0076		0.0038		0.01491
APR 22,86	MAR 25,86		0.097		0.164		0.272		0.014		0.0068		0.0025		0.00258
MAY 21,86	APR 22,86		0.111		0.278	D	0.494		0.017		0.0084		0.0022		0.00251
JUN 17,86	MAY 21,86		0.103	D	1.071	D	1.321		0.018	D	0.0338		0.0030		0.00039
JUL 15,86	JUN 17,86		0.072		0.364		0.339		0.015	D	0.0122		0.0028		0.00063
AUG 12,86	JUL 15,86		0.074	D	0.481	D	0.527		0.018	D	0.0142		0.0058		0.00168
SEP 9,86	AUG 12,86		0.090	D	1.222	D	1.632		0.017	D	0.0439		0.0047		0.00279
OCT 7,86	SEP 9,86		0.065	D	0.557	D	0.525		0.015	D	0.0198		0.0038		0.00174
NOV 4,86	OCT 7,86		0.078	D	0.454	D	0.485		0.011	D	0.0066		0.0036		0.00173
DEC 2,86	NOV 4,86		0.138	D	0.201	D	0.207		0.022		0.0074		0.0044		0.00106

REMOVAL DATE	EXPOSURE DATE		VANADIUM UG/M**3		ZINC UG/M**3		CADMIUM UG/M**3		SULPHATE NYLON F. UG/M**3
JAN 15,86	DEC 3,85	U	0.0092	U	0.069	U	0.01054	U	*****
JAN 28,86	JAN 15,86		0.0034		0.030		0.00365		1.0820
FEB 25,86	JAN 28,86		0.0017		0.003		0.00027		0.7175
MAR 25,86	FEB 25,86	<	0.0003		0.013		0.00051		0.4971
APR 22,86	MAR 25,86		0.0017		0.010		0.00068		0.4514
MAY 21,86	APR 22,86		0.0006		0.017		0.00057		0.3112
JUN 17,86	MAY 21,86		0.0022		0.010		0.00045		0.2857
JUL 15,86	JUN 17,86		0.0008		0.009		0.00029		0.3139
AUG 12,86	JUL 15,86		0.0009		0.011		0.00009		0.2710
SEP 9,86	AUG 12,86	D	0.0015		0.022		0.00043		0.3859
OCT 7,86	SEP 9,86	D	0.0009		0.010		0.00012		0.2441
NOV 4,86	OCT 7,86	<T	0.0010		0.010		0.00027		0.2274
DEC 2,86	NOV 4,86		0.0004		0.006		0.00070		0.2911

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	815	820	64688.0	35744	2	1		
FEB 25,86	JAN 28,86	820	835	64462.0	35800	2	1		
MAR 25,86	FEB 25,86	835	810	28946.0	35813	2	1	AC	F
APR 22,86	MAR 25,86	810	800	63180.0	35838	2	1	B	
MAY 20,86	APR 22,86	800	820	82590.0	35866	2	1		
JUN 17,86	MAY 20,86	820	815	82000.0	35910	2	1		
JUL 15,86	JUN 17,86	815	815	80600.0	35977	2	1		
AUG 12,86	JUL 15,86	815	815	78440.0	36042	2	1		
SEP 9,86	AUG 12,86	815	815	80160.0	36157	2	1		
OCT 7,86	SEP 9,86	815	815	90090.0	36236	2	1		
NOV 4,86	OCT 7,86	815	815	91750.0	36293	2	1		
DEC 2,86	NOV 4,86	815	825	93910.0	36378	2	1	Q	
DEC 29,86	DEC 2,86	825	800	82020.0	36464	2	1		

REMOVAL DATE	EXPOSURE DATE		SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	D	10.87	3.01	0.719	D 0.773	0.125	0.034	0.100
FEB 25,86	JAN 28,86		5.81	3.75	0.617	D 0.450	0.370	0.028	0.066
MAR 25,86	FEB 25,86		8.31	4.28	0.579	0.639	0.183	0.061	0.054
APR 22,86	MAR 25,86	U	1.50	2.98	0.289	0.332	0.155	0.032	2.873
MAY 20,86	APR 22,86		1.79	4.06	0.542	D 0.472	0.460	0.114	0.192
JUN 17,86	MAY 20,86		1.48	2.34	0.226	0.195	0.179	0.051	0.068
JUL 15,86	JUN 17,86	D	1.07	2.79	0.251	0.267	0.235	0.050	0.069
AUG 12,86	JUL 15,86		0.59	3.12	0.210	0.236	0.189	0.036	0.137
SEP 9,86	AUG 12,86		2.19	4.10	0.290	0.243	0.221	0.041	0.106
OCT 7,86	SEP 9,86		1.35	2.02	0.178	0.194	0.097	0.021	0.045
NOV 4,86	OCT 7,86		2.61	2.42	0.362	0.218	0.154	<T 0.023	0.048
DEC 2,86	NOV 4,86		2.25	0.43	0.256	0.123	0.105	0.003	0.310
DEC 29,86	DEC 2,86		8.98	3.11	0.597	0.378	0.087	0.022	0.040

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MCKELLAR/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE		SODIUM UG/M**3	IRON UG/M**3	ALUMINIUM UG/M**3	LEAD UG/M**3	MANGANESE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85		0.615	0.090	0.031	0.012	0.0039	0.0046	0.00247
FEB 25,86	JAN 28,86	D	0.496	0.056	0.031	0.044	0.0039	0.0028	0.00155
MAR 25,86	FEB 25,86	D	0.449	0.078	0.049	0.017	< 0.0017	0.0138	D 0.03178
APR 22,86	MAR 25,86	D	0.127	0.100	0.160	0.008	0.0040	0.0022	0.00269
MAY 20,86	APR 22,86		0.177	0.194	0.234	0.017	0.0088	0.0028	0.00569
JUN 17,86	MAY 20,86		0.073	0.095	0.112	0.014	0.0049	0.0017	0.00037
JUL 15,86	JUN 17,86		0.071	0.100	0.128	0.009	0.0038	0.0021	0.00025
AUG 12,86	JUL 15,86		0.070	0.076	0.091	0.015	0.0034	0.0015	0.00332
SEP 9,86	AUG 12,86		0.075	0.095	0.097	0.011	0.0057	0.0027	0.00225
OCT 7,86	SEP 9,86		0.067	0.032	0.033	0.011	0.0030	0.0023	0.00067
NOV 4,86	OCT 7,86		0.084	0.064	0.056	0.015	<T 0.0043	0.0043	0.00196
DEC 2,86	NOV 4,86		0.061	0.042	0.030	0.019	0.0017	0.0034	0.00085
DEC 29,86	DEC 2,86		0.235	0.040	0.035	D 0.020	0.0029	0.0037	0.00268

REMOVAL DATE	EXPOSURE DATE		VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85		0.0009	0.019	0.00107	0.5411
FEB 25,86	JAN 28,86		0.0016	0.011	0.00065	0.6671
MAR 25,86	FEB 25,86	<	0.0007	0.016	0.00076	D 1.1750
APR 22,86	MAR 25,86		0.0017	0.004	0.00068	U 0.7597
MAY 20,86	APR 22,86		0.0008	0.021	0.00062	0.4722
JUN 17,86	MAY 20,86		0.0002	0.005	0.00059	0.4756
JUL 15,86	JUN 17,86		0.0006	0.007	0.00016	0.3970
AUG 12,86	JUL 15,86		0.0006	0.005	0.00014	0.4335
SEP 9,86	AUG 12,86		0.0005	0.014	0.00039	0.6113
OCT 7,86	SEP 9,86		0.0002	0.005	0.00008	0.3330
NOV 4,86	OCT 7,86	<W	0.0005	0.008	0.00047	0.2834
DEC 2,86	NOV 4,86		0.0002	0.007	0.00042	D 0.3727
DEC 29,86	DEC 2,86		0.0007	0.010	0.00100	0.3536

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOONBEAM/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING		FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS	
		START HR.	END HR.					FIELD	OFFICE
JAN 29,86	DEC 31,85	1435	1445	84826.0	35738	2	1		
MAR 3,86	JAN 29,86	1445	1445	93351.0	35798	2	1	C	Z
MAR 25,86	MAR 3,86	1445	1445	61520.0	35812	2	1		Z
APR 28,86	MAR 25,86	1445	1300	92562.0	35840	2	1		Z
MAY 21,86	APR 28,86	1435	1345	91415.0	35868	2	1	C	Z
JUN 20,86	MAY 21,86	1345	1145	71847.0	35911	2	1	C	Z
JUL 15,86	JUN 20,86	1145	1140	70620.0	35978	2	1		Z
AUG 12,86	JUL 15,86	1140	1145	78260.0	36043	2	1		
SEP 9,86	AUG 12,86	1145	1345	78990.0	36159	2	1		
OCT 8,86	SEP 9,86	1345	1415	82950.0	36238	2	1		
NOV 5,86	OCT 8,86	1415	1340	79680.0	36295	2	1		
DEC 4,86	NOV 5,86	1340	1405	72240.0	36380	2	1		
DEC 29,86	DEC 4,86	1405	1348	53940.0	36466	2	1	AB	Z

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 29,86	DEC 31,85	2.53	1.30	0.168	0.307	0.068	0.039	0.044
MAR 3,86	JAN 29,86	4.32	1.82	0.099	0.155	0.287	0.073	0.035
MAR 25,86	MAR 3,86	3.47	2.54	0.163	0.382	0.390	0.113	0.085
APR 28,86	MAR 25,86	1.44	1.89	0.130	0.195	0.238	0.053	0.059
MAY 21,86	APR 28,86	0.48	0.71	0.049	0.153	0.159	0.028	0.013
JUN 20,86	MAY 21,86	0.36	1.18	0.035	0.230	D 1.357	0.341	0.056
JUL 15,86	JUN 20,86	<T 0.25	1.02	0.050	0.212	D 0.845	0.203	0.059
AUG 12,86	JUL 15,86	0.32	1.28	0.070	0.179	0.345	0.077	0.150
SEP 9,86	AUG 12,86	0.79	2.08	0.104	0.177	0.203	0.045	0.133
OCT 8,86	SEP 9,86	0.27	0.82	0.033	0.229	0.271	0.060	0.025
NOV 5,86	OCT 8,86	0.74	1.15	0.078	0.238	0.264	<T 0.036	0.051
DEC 4,86	NOV 5,86	0.94	1.22	0.114	0.152	0.079	0.013	0.065
DEC 29,86	DEC 4,86	1.37	1.63	0.148	0.213	0.123	0.032	0.039

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOONBEAM/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 29,86	DEC 31,85	0.238	0.023	0.015	0.002	0.0024	0.0037	0.00259
MAR 3,86	JAN 29,86	0.158	0.068	0.067	0.012	0.0032	0.0022	0.00086
MAR 25,86	MAR 3,86	0.333	0.080	0.100	0.011	0.0041	0.0039	0.01625
APR 28,86	MAR 25,86	0.086	0.088	0.136	0.009	0.0035	0.0041	0.00335
MAY 21,86	APR 28,86	0.074	0.047	0.071	0.002	0.0048	0.0010	0.00339
JUN 20,86	MAY 21,86	0.095	0.372	0.519	0.007	0.0102	0.0028	0.00014
JUL 15,86	JUN 20,86	0.081	0.228	0.297	0.004	0.0067	0.0023	0.00057
AUG 12,86	JUL 15,86	0.070	0.098	0.149	0.007	0.0034	0.0013	0.00281
SEP 9,86	AUG 12,86	0.082	0.083	0.103	0.005	0.0043	0.0019	0.00304
OCT 8,86	SEP 9,86	0.086	0.069	0.092	0.005	0.0029	0.0029	0.00036
NOV 5,86	OCT 8,86	0.127	<T 0.041	0.044	<T 0.002	<T 0.0030	0.0029	<T 0.00113
DEC 4,86	NOV 5,86	0.133	0.028	0.016	0.008	0.0007	0.0055	0.00055
DEC 29,86	DEC 4,86	0.165	0.029	0.029	0.005	0.0017	0.0037	0.00297

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 29,86	DEC 31,85	0.0006	0.006	0.00071	0.4716
MAR 3,86	JAN 29,86	0.0011	0.006	0.00041	0.2464
MAR 25,86	MAR 3,86	< 0.0003	0.008	0.00054	0.4226
APR 28,86	MAR 25,86	0.0022	0.008	0.00057	0.3781
MAY 21,86	APR 28,86	0.0002	D 0.002	0.00032	0.2078
JUN 20,86	MAY 21,86	0.0004	0.005	0.00053	0.1670
JUL 15,86	JUN 20,86	0.0006	0.005	0.00016	0.1982
AUG 12,86	JUL 15,86	0.0003	0.002	0.00013	0.2428
SEP 9,86	AUG 12,86	0.0003	0.005	D 0.00030	0.3671
OCT 8,86	SEP 9,86	0.0002	0.003	0.00004	0.1808
NOV 5,86	OCT 8,86	<W 0.0006	<T 0.003	0.00020	0.2008
DEC 4,86	NOV 5,86	0.0003	0.011	0.00060	0.2907
DEC 29,86	DEC 4,86	< 0.0004	0.006	0.00078	0.3337

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEEE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
FEB 25,86	JAN 23,86	1210	1300	84378.0	35796	2	1		Z
MAR 25,86	FEB 25,86	1300	1300	85229.0	35811	2	1		
APR 28,86	MAR 25,86	1300	1300	100180.0	35839	2	1		Z
JUN 4,86	APR 28,86	1300	1300	109158.0	35867	2	1		Z
JUN 20,86	JUN 4,86	1300	1400	43183.0	35912	2	1		Z
JUL 15,86	JUN 20,86	1400	1300	63406.0	35979	2	1		Z
AUG 12,86	JUL 15,86	1300	1300	76450.0	36044	2	1		
SEP 15,86	AUG 12,86	1300	1100	93953.0	36160	2	1		Z
OCT 21,86	SEP 15,86	1100	1515	100038.0	36239	2	1		Z
NOV 14,86	OCT 21,86	1515	1100	39504.0	36296	2	1		Z
DEC 30,86	DEC 2,86	****	1330	67639.0	36467	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3	
FEB 25,86	JAN 23,86	1.94	0.18	0.039	0.184	0.031	<	0.003	<W 0.006
MAR 25,86	FEB 25,86	0.99	1.39	0.059	0.452	0.282		0.086	0.050
APR 28,86	MAR 25,86	0.39	1.68	0.057	0.135	0.164		0.028	0.025
JUN 4,86	APR 28,86	0.85	1.26	0.055	0.201	0.366		0.067	0.032
JUN 20,86	JUN 4,86	<T 0.15	<T 0.19	0.023	0.301	0.090		0.022	0.015
JUL 15,86	JUN 20,86	<W 0.05	0.55	0.012	0.229	0.274		0.043	0.038
AUG 12,86	JUL 15,86	<T 0.21	0.63	0.026	0.229	0.314		0.045	0.059
SEP 15,86	AUG 12,86	0.42	1.49	0.011	0.277	0.187		0.047	0.145
OCT 21,86	SEP 15,86	0.47	0.70	0.030	0.515	0.072		0.050	0.028
NOV 14,86	OCT 21,86	<W 0.10	0.76	0.051	0.519	1.149	<T	0.147	0.033
DEC 30,86	DEC 2,86	1.16	0.67	0.063	0.237	0.082		0.025	U 118.000

ONTARIO MINISTRY OF THE ENVIRONMENT
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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : MOOSONEEE/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
FEB 25,86	JAN 23,86	0.050	0.013	0.006	0.007	0.0036	0.0012	0.00095
MAR 25,86	FEB 25,86	0.313	0.029	0.032	0.005	< 0.0006	0.0012	0.01021
APR 28,86	MAR 25,86	0.145	0.045	0.111	0.004	0.0017	0.0015	0.00210
JUN 4,86	APR 28,86	0.128	0.049	0.056	0.003	0.0020	0.0011	0.00027
JUN 20,86	JUN 4,86	0.147	0.031	0.015	0.001	0.0012	0.0023	0.00232
JUL 15,86	JUN 20,86	0.118	0.037	0.029	0.003	0.0017	0.0013	0.00016
AUG 12,86	JUL 15,86	0.144	0.040	0.063	0.003	0.0012	0.0010	0.00275
SEP 15,86	AUG 12,86	0.202	0.032	0.032	0.002	0.0027	0.0013	0.00043
OCT 21,86	SEP 15,86	0.323	0.014	0.014	0.003	0.0005	0.0023	0.00030
NOV 14,86	OCT 21,86	0.277	<T 0.096	0.069	<W 0.003	<W 0.0025	<T 0.0020	<T 0.00228
DEC 30,86	DEC 2,86	0.090	0.021	0.025	0.001	0.0013	0.0035	0.00857

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
FEB 25,86	JAN 23,86	0.0011	0.002	0.00019	0.5926
MAR 25,86	FEB 25,86	< 0.0002	0.004	0.00018	0.3637
APR 28,86	MAR 25,86	0.0014	0.002	0.00039	0.2795
JUN 4,86	APR 28,86	0.0002	0.002	0.00032	0.5405
JUN 20,86	JUN 4,86	0.0005	0.001	0.00079	<T 0.0232
JUL 15,86	JUN 20,86	0.0003	0.002	0.00017	<T 0.0789
AUG 12,86	JUL 15,86	0.0003	0.001	0.00013	0.1570
SEP 15,86	AUG 12,86	0.0022	0.005	0.00024	0.2661
OCT 21,86	SEP 15,86	0.0002	0.001	0.00011	0.1399
NOV 14,86	OCT 21,86	<W 0.0013	<W 0.003	0.00111	0.1519
DEC 30,86	DEC 2,86	0.0021	0.001	0.00100	0.4583

ONTARIO MINISTRY OF THE ENVIRONMENT
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STATION NAME : TURKEY LAKE/CUMULATIVE/LO-VOL #37

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	1130	1130	83190.0	35740	2	1		
FEB 25,86	JAN 28,86	1130	1100	71860.0	35791	2	1	B	
MAR 25,86	FEB 25,86	1100	1100	78738.0	35809	2	1	B	
APR 22,86	MAR 25,86	1100	1030	81463.0	35836	2	1		
MAY 20,86	APR 22,86	1030	900	81250.0	35863	2	1		
JUN 17,86	MAY 20,86	900	1000	79510.0	35908	2	1		
JUL 15,86	JUN 17,86	1000	1000	65540.0	35975	2	1		
AUG 12,86	JUL 15,86	1200	1000	75510.0	36041	2	1	DB	
SEP 9,86	AUG 12,86	1030	830	82300.0	36156	2	1	B	
OCT 7,86	SEP 9,86	830	700	77770.0	36235	2	1		
NOV 4,86	OCT 7,86	700	830	82940.0	36292	2	1	B	
DEC 2,86	NOV 4,86	830	815	84130.0	36377	2	1	B	
DEC 30,86	DEC 2,86	815	1030	38592.0	36463	2	1	A	F

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	*****	0.22	*****	0.174	0.012	D 0.003	0.048
FEB 25,86	JAN 28,86	5.05	2.53	0.195	0.097	0.241	0.017	0.073
MAR 25,86	FEB 25,86	3.05	2.53	0.289	0.292	0.091	0.044	0.029
APR 22,86	MAR 25,86	2.19	1.47	0.221	0.196	0.174	0.036	0.015
MAY 20,86	APR 22,86	3.37	3.79	0.391	0.252	0.365	0.100	0.062
JUN 17,86	MAY 20,86	0.74	1.76	0.141	0.075	0.140	0.043	0.058
JUL 15,86	JUN 17,86	0.43	1.80	0.153	0.183	0.158	0.044	0.070
AUG 12,86	JUL 15,86	<T 0.24	0.33	0.033	0.099	0.079	0.018	D 0.980
SEP 9,86	AUG 12,86	1.05	2.97	0.152	0.146	0.142	0.023	0.067
OCT 7,86	SEP 9,86	1.07	1.44	0.074	0.116	0.086	0.021	0.051
NOV 4,86	OCT 7,86	1.78	1.45	0.214	0.163	<T 0.115	<W 0.024	0.039
DEC 2,86	NOV 4,86	1.85	1.81	0.389	0.220	0.154	0.025	0.032
DEC 30,86	DEC 2,86	2.11	3.11	0.680	0.350	0.142	0.038	0.035

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : TURKEY LAKE/CUMULATIVE/LO-VOL #37

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.087	0.020	0.005	0.001	0.0006	0.0007	D 0.00144
FEB 25,86	JAN 28,86	0.120	0.031	0.017	0.031	0.0028	0.0026	0.00223
MAR 25,86	FEB 25,86	0.205	0.042	0.026	0.005	0.0032	0.0018	0.01168
APR 22,86	MAR 25,86	0.101	0.075	0.137	0.005	0.0036	0.0022	0.00540
MAY 20,86	APR 22,86	0.118	0.188	0.217	0.010	0.0078	0.0048	0.00578
JUN 17,86	MAY 20,86	0.073	0.107	0.142	0.005	0.0049	0.0021	0.00038
JUL 15,86	JUN 17,86	0.079	0.123	0.122	0.004	0.0049	0.0017	0.00031
AUG 12,86	JUL 15,86	D 0.030	0.050	0.054	0.003	0.0025	0.0030	0.00252
SEP 9,86	AUG 12,86	0.070	0.054	0.053	0.005	0.0035	0.0046	0.00352
OCT 7,86	SEP 9,86	0.079	0.020	0.029	0.003	0.0017	0.0030	0.00051
NOV 4,86	OCT 7,86	0.069	<T 0.043	0.032	<T 0.004	<T 0.0034	0.0024	0.00133
DEC 2,86	NOV 4,86	0.106	0.067	0.047	0.009	0.0042	0.0015	0.00083
DEC 30,86	DEC 2,86	0.141	0.044	0.037	0.004	0.0026	0.0021	0.00311

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0007	0.001	0.00029	*****
FEB 25,86	JAN 28,86	0.0013	0.004	0.00040	0.4731
MAR 25,86	FEB 25,86	< 0.0003	0.008	0.00033	0.5334
APR 22,86	MAR 25,86	0.0018	0.003	0.00048	0.3683
MAY 20,86	APR 22,86	0.0007	0.016	0.00062	0.4431
JUN 17,86	MAY 20,86	0.0003	0.004	0.00047	0.3522
JUL 15,86	JUN 17,86	0.0006	0.006	0.00018	0.3662
AUG 12,86	JUL 15,86	0.0003	0.021	0.00033	0.3178
SEP 9,86	AUG 12,86	0.0002	0.023	0.00041	0.4374
OCT 7,86	SEP 9,86	0.0003	0.002	0.00003	0.3343
NOV 4,86	OCT 7,86	<W 0.0006	<W 0.001	0.00017	0.3014
DEC 2,86	NOV 4,86	0.0002	0.005	0.00040	0.2496
DEC 30,86	DEC 2,86	< 0.0005	0.002	0.00073	D 0.7515

PART VII

NORTHWESTERN REGION CUMULATIVE AMBIENT AIR CONCENTRATION RESULTS

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START END HR. HR.		FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD OFFICE	
JAN 28,86	DEC 31,85	914	915	85167.0	34072	2	1		
FEB 25,86	JAN 28,86	915	915	85721.0	34073	2	1		
MAR 25,86	FEB 25,86	916	900	70694.0	34074	2	1	A	
APR 22,86	MAR 25,86	905	902	77879.0	34075	2	1		
MAY 20,86	APR 22,86	912	1030	77174.0	34076	2	1	B	
JUN 17,86	MAY 20,86	1036	900	78765.0	34077	2	1		
JUL 15,86	JUN 17,86	900	929	78165.0	34078	2	1		
AUG 12,86	JUL 15,86	929	915	74832.0	34079	2	1		
SEP 9,86	AUG 12,86	919	900	74527.0	34080	2	1	B	
OCT 7,86	SEP 9,86	900	1105	75213.0	34081	2	1		
NOV 4,86	OCT 7,86	1105	909	76289.0	34082	2	1		
DEC 2,86	NOV 4,86	914	905	81250.0	34084	2	1		
DEC 30,86	DEC 2,86	910	933	78155.0	34086	2	1	B	

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	1.15	1.53	0.170	0.123	0.059	0.020	0.044
FEB 25,86	JAN 28,86	1.19	1.81	0.117	0.087	0.198	0.019	0.029
MAR 25,86	FEB 25,86	0.88	2.42	0.156	0.149	0.199	0.201	0.033
APR 22,86	MAR 25,86	0.78	1.48	0.109	0.116	0.157	0.092	0.072
MAY 20,86	APR 22,86	0.71	3.30	0.207	0.117	0.304	0.120	0.067
JUN 17,86	MAY 20,86	<T	1.08	0.073	0.146	0.400	D 0.609	0.063
JUL 15,86	JUN 17,86	<T	1.15	0.058	0.109	0.191	0.204	0.080
AUG 12,86	JUL 15,86	<W	1.36	0.094	0.114	0.171	0.120	0.134
SEP 9,86	AUG 12,86	<T	1.99	0.023	0.148	0.153	0.079	0.109
OCT 7,86	SEP 9,86	0.24	1.13	0.043	0.153	0.103	0.053	0.115
NOV 4,86	OCT 7,86	0.52	0.92	0.115	0.170	<T 0.108	<W 0.026	0.049
DEC 2,86	NOV 4,86	0.80	1.17	0.129	0.111	0.096	0.035	D 0.293
DEC 30,86	DEC 2,86	0.53	0.90	0.163	0.122	0.075	0.018	D 0.352

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : DORION/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.167	0.038	0.026	0.001	0.0012	0.0011	0.00223
FEB 25,86	JAN 28,86	0.149	0.027	0.025	0.018	0.0018	0.0006	0.00117
MAR 25,86	FEB 25,86	0.212	0.120	0.278	0.005	0.0057	0.0017	0.0011
APR 22,86	MAR 25,86	0.016	0.095	0.095	0.005	0.0041	0.0077	0.00141
MAY 20,86	APR 22,86	0.090	0.139	0.249	0.009	0.0060	0.0023	0.00311
JUN 17,86	MAY 20,86	0.081	0.336	0.900	0.006	0.0124	0.0019	0.00013
JUL 15,86	JUN 17,86	0.070	0.137	0.333	0.007	0.0054	0.0014	0.00077
AUG 12,86	JUL 15,86	0.187	0.102	0.182	0.003	0.0056	0.0016	0.00240
SEP 9,86	AUG 12,86	0.081	0.067	0.153	0.002	0.0050	0.0013	0.00040
OCT 7,86	SEP 9,86	D 0.264	0.055	0.075	0.003	D 0.0062	0.0019	0.00040
NOV 4,86	OCT 7,86	0.070	<T 0.039	0.047	0.010	D 0.0138	0.0018	<T 0.00131
DEC 2,86	NOV 4,86	0.092	0.032	0.048	0.004	0.0018	D 0.0015	0.00148
DEC 30,86	DEC 2,86	0.110	D 0.449	0.022	0.002	0.0024	0.0006	0.00090

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0007	0.014	0.00045	0.2113
FEB 25,86	JAN 28,86	0.0012	0.006	0.00028	0.2800
MAR 25,86	FEB 25,86	< 0.0003	0.006	0.00031	0.4244
APR 22,86	MAR 25,86	0.0024	0.008	0.00031	0.2440
MAY 20,86	APR 22,86	0.0005	0.014	0.00088	0.2851
JUN 17,86	MAY 20,86	0.0008	0.003	0.00044	0.2412
JUL 15,86	JUN 17,86	0.0005	0.003	0.00042	0.2047
AUG 12,86	JUL 15,86	D 0.0004	0.004	0.00031	0.2806
SEP 9,86	AUG 12,86	0.0036	0.004	0.00031	0.2549
OCT 7,86	SEP 9,86	0.0003	0.010	0.00012	0.1861
NOV 4,86	OCT 7,86	<W 0.0007	<T 0.004	0.00017	D 0.3801
DEC 2,86	NOV 4,86	< 0.0002	< 0.001	0.00036	0.6892
DEC 30,86	DEC 2,86	< 0.0003	0.001	0.00037	0.6398

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALLS/CUMULATIVE/LO-VOL #35

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	855	945	83198.0	34273	2	1		
FEB 26,86	JAN 28,86	945	815	88234.0	34274	2	1		
MAR 25,86	FEB 26,86	815	835	81194.0	34275	2	1		
APR 23,86	MAR 25,86	835	900	43149.0	34276	2	1	AC	
MAY 21,86	APR 23,86	1000	900	58246.0	34277	2	1	B	
JUN 18,86	MAY 21,86	900	830	76904.0	34278	2	1		
JUL 15,86	JUN 18,86	830	900	73827.0	34279	2	1		
AUG 12,86	JUL 15,86	900	900	75834.0	34280	2	1		
SEP 9,86	AUG 12,86	900	930	73113.0	34281	2	1		
OCT 7,86	SEP 9,86	930	1000	48943.0	34282	2	1	A	
NOV 4,86	OCT 7,86	1000	1030	84934.0	34283	2	1		
DEC 2,86	NOV 4,86	1030	1030	80379.0	34284	2	1		
DEC 30,86	DEC 2,86	1030	915	79278.0	34285	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	0.99	1.56	0.159	0.090	0.117	0.015	0.048
FEB 26,86	JAN 28,86	0.93	1.79	0.119	0.102	0.260	0.024	0.037
MAR 25,86	FEB 26,86	1.13	2.17	0.169	0.185	0.058	0.034	0.047
APR 23,86	MAR 25,86	0.70	1.16	0.110	0.220	0.122	0.036	0.059
MAY 21,86	APR 23,86	<T	1.46	0.077	0.112	0.197	0.046	0.039
JUN 18,86	MAY 21,86	<W	0.81	0.085	0.150	0.364	0.159	0.082
JUL 15,86	JUN 18,86	<W	0.41	0.058	0.129	0.100	0.027	0.064
AUG 12,86	JUL 15,86	<W	0.62	0.063	0.119	0.111	0.036	0.073
SEP 9,86	AUG 12,86	<T	0.15	0.010	0.123	0.055	0.007	0.018
OCT 7,86	SEP 9,86	<W	0.82	0.036	0.143	0.099	0.029	0.047
NOV 4,86	OCT 7,86		1.24	0.106	0.153	0.141	<T	0.095
DEC 2,86	NOV 4,86	0.71	0.93	0.103	0.112	0.069	0.024	0.089
DEC 30,86	DEC 2,86	0.79	1.32	0.259	0.145	D 0.088	0.028	0.076

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : EAR FALLS/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMINIUM UG/M**3	LEAD UG/M**3	MANGANESE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.154	0.030	0.024	0.005	0.0012	0.0016	0.00240
FEB 26,86	JAN 28,86	0.128	0.038	0.021	0.019	0.0023	0.0003	0.00113
MAR 25,86	FEB 26,86	0.191	0.039	0.034	0.004	0.0010	0.0012	0.00345
APR 23,86	MAR 25,86	0.007	0.086	0.113	0.004	0.0023	0.0107	0.01020
MAY 21,86	APR 23,86	0.082	0.138	0.258	0.005	0.0038	0.0021	0.00378
JUN 18,86	MAY 21,86	0.077	0.331	0.461	0.008	0.0099	0.0013	0.00091
JUL 15,86	JUN 18,86	D 0.278	0.070	0.100	0.004	0.0034	0.0004	0.00014
AUG 12,86	JUL 15,86	0.148	0.074	0.094	0.005	0.0030	0.0011	0.00237
SEP 9,86	AUG 12,86	0.072	0.023	0.031	0.001	0.0015	0.0003	0.00027
OCT 7,86	SEP 9,86	0.031	0.057	0.074	0.005	0.0025	0.0016	0.00061
NOV 4,86	OCT 7,86	0.088	0.075	0.101	0.007	<T 0.0027	<T 0.0008	<T 0.00118
DEC 2,86	NOV 4,86	0.147	0.027	0.030	0.004	0.0014	0.0007	0.00212
DEC 30,86	DEC 2,86	0.163	0.032	0.034	0.004	0.0020	0.0005	0.00227

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0006	0.011	0.00050	0.1803
FEB 26,86	JAN 28,86	0.0011	0.006	0.00037	0.2493
MAR 25,86	FEB 26,86	< 0.0002	0.006	0.00022	0.3818
APR 23,86	MAR 25,86	0.0079	0.004	D 0.00144	0.4867
MAY 21,86	APR 23,86	0.0003	0.009	D 0.00165	0.1545
JUN 18,86	MAY 21,86	0.0004	0.005	0.00053	0.1040
JUL 15,86	JUN 18,86	0.0003	0.002	0.00039	0.1625
AUG 12,86	JUL 15,86	0.0003	0.005	0.00029	0.1582
SEP 9,86	AUG 12,86	0.0027	0.002	0.00025	0.2188
OCT 7,86	SEP 9,86	0.0004	0.003	0.00078	0.1226
NOV 4,86	OCT 7,86	<W 0.0006	<W 0.001	0.00022	0.1177
DEC 2,86	NOV 4,86	< 0.0002	D 0.002	0.00039	0.8211
DEC 30,86	DEC 2,86	< 0.0003	D 0.002	0.00047	0.8073

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE/LO-VOL #30

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 30,86	JAN 1,86	1130	1640	35863.0	32750	2	1	A	F
FEB 25,86	JAN 30,86	1640	1635	70861.0	32752	2	1		Z
MAR 25,86	FEB 25,86	1635	1430	47844.0	32754	2	1	A	
APR 23,86	MAR 25,86	1430	1500	84905.0	32756	2	1		
MAY 20,86	APR 23,86	1500	1030	75718.0	32758	2	1		
JUN 17,86	MAY 20,86	1030	2140	79830.0	32760	2	1		
JUL 15,86	JUN 17,86	2140	1000	76077.0	32762	2	1		
AUG 12,86	JUL 15,86	1000	1000	74652.0	32764	2	1		
SEP 9,86	AUG 12,86	1000	955	73463.0	32766	2	1		
OCT 7,86	SEP 9,86	955	1000	79286.0	32768	2	1		
NOV 4,86	OCT 7,86	1000	1045	81699.0	32770	2	1	C	
DEC 2,86	NOV 4,86	1045	1000	85336.0	32773	2	1		
DEC 30,86	DEC 2,86	1000	1630	88135.0	32774	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 30,86	JAN 1,86	1.77	1.17	0.160	0.293	0.172	0.012	0.084
FEB 25,86	JAN 30,86	1.42	1.66	0.113	0.141	0.123	0.032	0.028
MAR 25,86	FEB 25,86	0.45	1.71	0.110	0.157	0.178	0.071	0.026
APR 23,86	MAR 25,86	0.87	0.21	0.082	0.147	0.030	0.005	0.034
MAY 20,86	APR 23,86	1.71	0.38	0.145	0.139	0.127	0.003	<W 0.007
JUN 17,86	MAY 20,86	<T 0.23	0.69	0.056	0.132	0.445	0.083	0.043
JUL 15,86	JUN 17,86	<T 0.11	0.76	0.049	0.138	0.424	0.081	0.046
AUG 12,86	JUL 15,86	<W 0.16	1.06	0.033	0.167	D 0.864	0.145	0.107
SEP 9,86	AUG 12,86	<T 0.32	1.88	0.054	0.088	0.165	0.032	0.054
OCT 7,86	SEP 9,86	<W 0.08	0.69	0.019	0.145	0.131	0.024	D 0.306
NOV 4,86	OCT 7,86	0.33	1.13	0.095	0.208	0.235	<T 0.026	0.040
DEC 2,86	NOV 4,86	0.41	0.82	0.094	0.059	0.088	0.016	0.014
DEC 30,86	DEC 2,86	0.81	1.34	0.201	0.119	0.079	0.028	0.021

ONTARIO MINISTRY OF THE ENVIRONMENT
AIR SAMPLING ANALYSIS RESULTS
APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

STATION NAME : GERALDTON/CUMULATIVE/LO-VOL

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 30,86	JAN 1,86	0.202	0.057	0.023	0.041	0.0022	0.0014	0.00418
FEB 25,86	JAN 30,86	0.161	0.026	0.017	0.011	0.0014	D 0.0017	0.00268
MAR 25,86	FEB 25,86	0.178	0.037	0.040	0.004	0.0010	0.0017	0.00272
APR 23,86	MAR 25,86	0.004	0.020	0.020	0.001	0.0009	0.0054	0.00318
MAY 20,86	APR 23,86	0.053	D 0.024	0.018	0.002	0.0013	0.0018	0.00396
JUN 17,86	MAY 20,86	0.073	0.084	0.114	0.002	0.0026	0.0015	0.00013
JUL 15,86	JUN 17,86	0.069	0.068	0.079	0.003	0.0032	0.0008	0.00013
AUG 12,86	JUL 15,86	D 0.526	0.110	0.127	0.003	0.0054	0.0052	0.00255
SEP 9,86	AUG 12,86	0.082	0.047	0.044	0.001	0.0037	0.0010	0.00041
OCT 7,86	SEP 9,86	0.113	0.033	0.022	0.001	0.0024	0.0023	0.00025
NOV 4,86	OCT 7,86	U 0.145	<T 0.042	0.044	<W 0.001	<T 0.0013	<T 0.0011	0.00171
DEC 2,86	NOV 4,86	0.081	0.025	0.022	0.001	0.0009	0.0007	0.00199
DEC 30,86	DEC 2,86	0.176	0.022	0.020	0.002	< 0.0006	D 0.0012	0.00170

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 30,86	JAN 1,86	D 0.0014	0.011	0.00081	D 0.5577
FEB 25,86	JAN 30,86	0.0007	0.004	0.00040	0.3528
MAR 25,86	FEB 25,86	< 0.0004	0.007	0.00052	0.3344
APR 23,86	MAR 25,86	0.0032	0.005	0.00014	0.6478
MAY 20,86	APR 23,86	0.0011	0.003	0.00037	D 1.1750
JUN 17,86	MAY 20,86	0.0003	0.001	0.00046	0.2255
JUL 15,86	JUN 17,86	0.0003	0.002	0.00039	0.1314
AUG 12,86	JUL 15,86	0.0003	0.004	0.00035	0.2411
SEP 9,86	AUG 12,86	0.0031	0.005	0.00030	0.3539
OCT 7,86	SEP 9,86	0.0005	0.004	0.00057	0.1135
NOV 4,86	OCT 7,86	<W 0.0006	<T 0.005	0.00026	0.1714
DEC 2,86	NOV 4,86	< 0.0002	< 0.001	0.00039	0.5273
DEC 30,86	DEC 2,86	< 0.0002	0.001	0.00043	0.7829

ONTARIO MINISTRY OF THE ENVIRONMENT
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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
MAY 20,86	APR 22,86	900	900	80318.0	31081	2	1		
JUN 17,86	MAY 20,86	900	900	76728.0	31082	2	1		
JUL 15,86	JUN 17,86	1100	900	80834.0	31083	2	1		
AUG 12,86	JUL 15,86	900	900	78161.0	31084	2	1		
SEP 9,86	AUG 12,86	900	900	80488.0	31085	2	1		
OCT 7,86	SEP 9,86	900	900	80930.0	31086	2	1		
NOV 4,86	OCT 7,86	900	900	82010.0	31087	2	1		

REMOVAL DATE	EXPOSURE DATE		SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
MAY 20,86	APR 22,86		1.44	2.18	0.299	0.112	0.252	0.053	0.025
JUN 17,86	MAY 20,86	D	0.52	1.37	0.137	D 0.078	0.116	0.033	0.041
JUL 15,86	JUN 17,86	<T	0.37	1.11	0.142	0.142	0.124	0.029	0.074
AUG 12,86	JUL 15,86	<W	0.26	0.61	0.090	0.077	0.058	0.006	<W 0.003
SEP 9,86	AUG 12,86		0.57	1.23	0.090	<T 0.050	0.083	0.017	*****
OCT 7,86	SEP 9,86	D	0.56	0.40	0.031	0.080	0.029	0.006	0.019
NOV 4,86	OCT 7,86		0.39	0.55	0.101	0.110	<T 0.066	<W 0.024	0.016

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
MAY 20,86	APR 22,86	0.072	0.094	0.126	0.008	0.0047	0.0036	0.00336
JUN 17,86	MAY 20,86	0.091	0.079	0.066	0.004	0.0027	0.0022	0.00013
JUL 15,86	JUN 17,86	0.071	0.060	0.057	0.004	0.0030	0.0009	0.00012
AUG 12,86	JUL 15,86	0.058	0.021	0.024	0.002	0.0006	0.0009	0.00230
SEP 9,86	AUG 12,86	0.071	0.022	0.022	0.002	0.0021	0.0011	0.00075
OCT 7,86	SEP 9,86	0.023	0.020	0.016	0.001	0.0006	0.0007	0.00025
NOV 4,86	OCT 7,86	0.059	<T 0.020	<T 0.012	<W 0.001	<W 0.0012	<T 0.0009	<T 0.00122

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
MAY 20,86	APR 22,86	0.0002	0.012	0.00045	0.4358
JUN 17,86	MAY 20,86	0.0003	0.003	0.00050	0.3649
JUL 15,86	JUN 17,86	0.0002	0.003	0.00040	D 0.4206
AUG 12,86	JUL 15,86	0.0003	0.001	0.00032	0.3838
SEP 9,86	AUG 12,86	0.0027	0.003	0.00021	0.4473
OCT 7,86	SEP 9,86	0.0002	0.001	0.00061	D 0.3954
NOV 4,86	OCT 7,86	<W 0.0006	<T 0.003	0.00013	0.2195

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	SAMPLING END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	1430	1430	43867.0	34365	2	1	A	
FEB 25,86	JAN 28,86	1430	1420	50546.0	34367	2	1	C	
MAR 25,86	FEB 25,86	1430	1430	33078.0	34368	2	1	CA	F
APR 22,86	MAR 25,86	1430	1420	66132.0	34369	2	1	AC	
MAY 20,86	APR 22,86	1430	1700	86361.0	34370	2	1		
JUN 17,86	MAY 20,86	1700	1430	80319.0	34371	2	1		
JUL 15,86	JUN 17,86	1430	1430	84849.0	34372	2	1		
AUG 13,86	JUL 15,86	1430	1430	81695.0	34373	2	1		
SEP 12,86	AUG 13,86	1430	1430	84232.0	34375	2	1	Q	Z
OCT 8,86	SEP 12,86	1430	1430	73842.0	34376	2	1		Z
NOV 5,86	OCT 8,86	1430	1730	82382.0	34377	2	1		
DEC 3,86	NOV 5,86	1730	1715	85858.0	34378	2	1		
DEC 30,86	DEC 3,86	1715	1030	81500.0	34379	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	0.81	1.82	0.129	0.194	0.156	0.027	0.131
FEB 25,86	JAN 28,86	1.50	D 2.61	0.124	0.208	0.142	0.038	0.035
MAR 25,86	FEB 25,86	1.81	D 5.23	0.249	D 0.771	D 0.840	0.242	D 0.116
APR 22,86	MAR 25,86	0.33	1.85	0.083	0.151	D 0.468	0.101	0.036
MAY 20,86	APR 22,86	<T 0.17	1.39	0.055	0.081	0.284	0.056	0.023
JUN 17,86	MAY 20,86	<T 0.11	0.81	0.047	0.143	0.791	0.243	0.049
JUL 15,86	JUN 17,86	<W 0.05	0.47	0.041	0.136	0.504	0.174	0.050
AUG 13,86	JUL 15,86	<W 0.09	0.57	0.067	0.110	0.324	0.092	0.034
SEP 12,86	AUG 13,86	<W 0.07	0.93	0.027	0.131	D 0.457	0.134	0.069
OCT 8,86	SEP 12,86	<W 0.05	0.61	0.024	0.135	0.148	0.034	0.037
NOV 5,86	OCT 8,86	0.22	1.19	0.085	0.182	0.223	<T 0.064	0.076
DEC 3,86	NOV 5,86	0.65	0.72	0.070	0.111	0.053	0.020	0.027
DEC 30,86	DEC 3,86	0.51	1.29	0.160	0.110	0.076	0.028	0.026

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APIOS - ACIDIC PRECIPITATION IN ONTARIO STUDY

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.188	0.035	0.017	0.026	D	0.0068	0.00387
FEB 25,86	JAN 28,86	0.219	0.030	0.018	0.032		0.0020	0.00178
MAR 25,86	FEB 25,86	D 0.845	0.197	0.237	D 0.033		0.0060	0.00332
APR 22,86	MAR 25,86	0.025	0.184	0.237	D 0.013		0.0047	0.00514
MAY 20,86	APR 22,86	0.060	0.120	0.186	0.005		0.0031	0.00324
JUN 17,86	MAY 20,86	0.082	0.439	0.452	0.013		0.0102	0.00075
JUL 15,86	JUN 17,86	0.068	D 0.309	0.293	D 0.013		0.0084	D 0.0127
AUG 13,86	JUL 15,86	0.110	0.161	0.161	0.007		0.0051	0.00233
SEP 12,86	AUG 13,86	0.068	D 0.226	0.249	0.002		0.0072	D 0.0082
OCT 8,86	SEP 12,86	0.044	0.055	0.050	0.009		0.0012	0.0024
NOV 5,86	OCT 8,86	0.092	0.110	0.108	0.011	<T	0.0025	0.0045
DEC 3,86	NOV 5,86	0.126	0.017	0.017	0.006		0.0009	0.0006
DEC 30,86	DEC 3,86	0.152	0.021	0.021	0.005		0.0010	0.0005

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0007	0.005	0.00059	0.2508
FEB 25,86	JAN 28,86	0.0020	0.009	0.00059	0.4155
MAR 25,86	FEB 25,86	< 0.0006	D 0.050	D 0.00121	0.6349
APR 22,86	MAR 25,86	0.0047	0.002	0.00047	0.2268
MAY 20,86	APR 22,86	0.0002	0.005	0.00060	0.1274
JUN 17,86	MAY 20,86	0.0011	0.002	0.00040	0.0747
JUL 15,86	JUN 17,86	0.0007	0.002	0.00032	0.0707
AUG 13,86	JUL 15,86	0.0002	0.004	0.00029	0.1346
SEP 12,86	AUG 13,86	0.0023	0.003	0.00021	0.1068
OCT 8,86	SEP 12,86	0.0003	0.003	0.00054	0.0813
NOV 5,86	OCT 8,86	<W 0.0006	<T 0.004	0.00025	0.1092
DEC 3,86	NOV 5,86	< 0.0002	< 0.001	0.00034	0.8037
DEC 30,86	DEC 3,86	< 0.0002	0.001	0.00043	0.5399

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REMOVAL DATE	EXPOSURE DATE	SAMPLING START HR.	END HR.	FLOW VOLUME(L)	SAMPLE NUMBER	PROJECT CODE 02-APIOS 03-SPECIAL	SUBPROJECT CODE 01-MOE 03-AES 04-ON HYDRO	COMMENTS FIELD	OFFICE
JAN 28,86	DEC 31,85	900	1100	79527.0	32650	2	1		
FEB 25,86	JAN 28,86	1100	1100	84502.0	32651	2	1		
MAR 25,86	FEB 25,86	1100	900	83229.0	32652	2	1		
APR 22,86	MAR 25,86	900	900	80036.0	32653	2	1		
MAY 20,86	APR 22,86	900	1200	74840.0	32654	2	1		
JUN 17,86	MAY 20,86	1200	900	80506.0	32655	2	1		
JUL 15,86	JUN 17,86	900	900	79024.0	32656	2	1		
AUG 19,86	JUL 15,86	900	900	99821.0	32657	2	1	Q	Z
SEP 9,86	AUG 19,86	900	900	60878.0	32658	2	1	Q	Z
OCT 7,86	SEP 9,86	900	900	78492.0	32659	2	1		
NOV 4,86	OCT 7,86	900	900	81372.0	32660	2	1		
DEC 2,86	NOV 4,86	900	900	61410.0	32661	2	1	A	
DEC 30,86	DEC 2,86	900	900	88359.0	32662	2	1		

REMOVAL DATE	EXPOSURE DATE	SULPHUR DIOXIDE UG/M**3	SULPHATE UG/M**3	TOTAL N -NITRATE UG/M**3	CHLORIDE UG/M**3	CALCIUM UG/M**3	MAGNESIM UG/M**3	POTASSIM UG/M**3
JAN 28,86	DEC 31,85	0.99	1.41	0.226	0.157	0.140	0.021	0.050
FEB 25,86	JAN 28,86	1.06	1.54	0.104	0.118	0.217	0.015	0.038
MAR 25,86	FEB 25,86	0.42	1.54	0.105	0.198	0.102	0.050	0.028
APR 22,86	MAR 25,86	0.54	1.35	0.137	0.137	0.130	0.024	0.030
MAY 20,86	APR 22,86	<T 0.29	2.00	0.100	0.134	0.208	0.030	0.037
JUN 17,86	MAY 20,86	<T 0.16	1.12	0.087	0.137	0.180	0.060	0.049
JUL 15,86	JUN 17,86	<T 0.19	0.86	0.076	0.095	0.118	0.033	0.098
AUG 19,86	JUL 15,86	*****	0.82	0.075	0.075	0.097	0.024	0.030
SEP 9,86	AUG 19,86	<T 0.29	1.36	0.037	0.164	0.196	0.046	*****
OCT 7,86	SEP 9,86	<W 0.13	1.02	0.051	0.102	0.078	0.024	0.044
NOV 4,86	OCT 7,86	0.31	1.20	0.129	0.184	0.133	<W 0.025	0.071
DEC 2,86	NOV 4,86	0.54	0.90	0.142	0.147	0.076	0.021	0.023
DEC 30,86	DEC 2,86	0.69	0.88	0.204	0.141	0.075	0.021	0.020

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REMOVAL DATE	EXPOSURE DATE	SODIUM UG/M**3	IRON UG/M**3	ALUMNIUM UG/M**3	LEAD UG/M**3	MANGANSE UG/M**3	COPPER UG/M**3	NICKEL UG/M**3
JAN 28,86	DEC 31,85	0.153	0.046	0.030	0.003	0.0019	0.0010	0.00189
FEB 25,86	JAN 28,86	0.124	0.024	0.018	0.021	0.0012	0.0004	0.00106
MAR 25,86	FEB 25,86	0.235	0.005	0.099	0.000	D 0.0877	0.0012	D 0.00132
APR 22,86	MAR 25,86	0.017	0.149	0.085	0.003	0.0029	0.0062	0.00225
MAY 20,86	APR 22,86	0.070	0.097	0.148	0.004	0.0033	0.0015	0.00347
JUN 17,86	MAY 20,86	0.112	0.133	0.138	0.003	0.0046	0.0020	0.00099
JUL 15,86	JUN 17,86	0.070	0.081	0.083	0.003	0.0039	0.0004	0.00013
AUG 19,86	JUL 15,86	0.063	0.051	0.058	0.002	0.0025	0.0014	0.00190
SEP 9,86	AUG 19,86	0.094	0.065	0.076	0.002	0.0049	0.0007	0.00033
OCT 7,86	SEP 9,86	0.029	0.039	0.042	0.002	0.0018	0.0022	0.00064
NOV 4,86	OCT 7,86	0.076	<T 0.059	0.054	<T 0.003	<T 0.0018	0.0014	0.00160
DEC 2,86	NOV 4,86	0.100	0.031	0.030	< 0.001	0.0016	0.0008	0.00293
DEC 30,86	DEC 2,86	0.093	0.033	0.033	0.002	0.0012	0.0006	0.00192

REMOVAL DATE	EXPOSURE DATE	VANADIUM UG/M**3	ZINC UG/M**3	CADMIUM UG/M**3	SULPHATE NYLON F. UG/M**3
JAN 28,86	DEC 31,85	0.0005	0.008	0.00047	0.1886
FEB 25,86	JAN 28,86	0.0012	0.004	0.00033	0.2959
MAR 25,86	FEB 25,86	< 0.0002	0.005	0.00019	0.2163
APR 22,86	MAR 25,86	0.0027	0.008	0.00026	0.2499
MAY 20,86	APR 22,86	0.0008	0.008	0.00039	0.2405
JUN 17,86	MAY 20,86	0.0011	0.002	0.00047	0.1491
JUL 15,86	JUN 17,86	0.0003	0.003	0.00035	0.1898
AUG 19,86	JUL 15,86	0.0002	0.003	0.00023	0.3907
SEP 9,86	AUG 19,86	0.0036	0.006	0.00030	0.2628
OCT 7,86	SEP 9,86	D 0.0013	0.007	0.00048	0.1911
NOV 4,86	OCT 7,86	<T 0.0015	<T 0.003	0.00031	0.1843
DEC 2,86	NOV 4,86	< 0.0003	< 0.001	0.00042	0.6188
DEC 30,86	DEC 2,86	< 0.0002	0.001	0.00027	0.5546

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